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ABSTRACT

In September 1964, students in the three junior high schools of the Berkeley, California community entered segregated eighth, ninth, and tenth grades. Near the end of the first year of the desegregation program, the principal investigator was asked by the School Board to make a survey of the students' attitudes toward the program. Following the second year of the program, the principal investigator was again asked to conduct a survey to determine what changes in attitude had occurred over the past school year. The investigation reported here is the third in this series of surveys, and is designed to measure the attitudes of graduating high school seniors to a school integration program that began when the students were enrolled in seventh grade classes in the community. By means of a mail survey conducted in the summer of 1970, students were asked questions concerning interracial friendships they made and developed during school, their experiences with interracial violence and aggression, their evaluation of the pursuit of education in an integrated school, their perception of social mixing on the part of other students, the quality of education they received in integrated classes, and their own experiences with interracial dating. (Author/JM)

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Final Report

Project No. 0-I-050
Grant No. OEG-9-70-0027(057)

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FOLLOW UP STUDY OF STUDENT ATTITUDE TOWARD SCHOOL REORGANIZATION OF THE PUBLIC SCHOOLS OF A NORTHERN CITY

January 1972

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The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
National Center for Educational Research and Development

Author's Abstract

This investigation consists of a follow up study designed to measure the attitudes of graduating high school seniors to a school integration program that began when the students were enrolled in seventh grade classes in the community. By means of a mail survey conducted in the summer of 1970, students were asked questions concerning interracial friendships they made and developed during school, their experiences with interracial violence and agression, their evaluation of the pursuit of education in an integrated school, their perception of social mixing on the part of other students, the quality of education they received in an integrated setting, the performance of teachers in integrated classes, and their own experiences with interracial dating. These questions are analyzed by means of factor analyses, multivariate analyses of variance, and linear discriminant analyses. For the analyses, comparisons are made across sex, race, and socio-economic status and wherever possible, comparisons are made with the results of comparable studies performed in 1965 and 1966 on these same students.

Preface

A study of the attitudes of a class of graduating high school students requires the interest, work, and assistance of many people. Cooperation and encouragement are required right at the start of such a massive undertaking. Fortunately, these characteristics were available in abundant quantities from the teachers and administrative personnel of the Berkeley Unified School District and from the graduate assistants at the University of California at Berkeley.

In particular, special appreciation must go to the late Dr. Joseph Rodeheaver of the Berkeley School District for making the arrangements to conduct the study and for bringing teachers of the Social Studies Department of Berkeley High School into the early planning stages of the study and into the questionnaire writing deliberations.

Because of their fine job, suggestions, and concerns, special thanks are expressed to the Social Studies teachers Clarence Hampton, High Houck, Tom Johnson, Jayne Millar, and Jean Wilkinson, of Berkeley High School for the long hours of work they devoted to the preparation of the three questionnaires. Without the help of these dedicated teachers, the questionnaires would never have been as probing and as complete as they are.

Also contributing significant thoughts, criticisms, and additions to the questionnaire writing period was Mrs. Irene Wong, a former student at Berkeley. It was mainly because of her careful bookkeeping, letter writing, telephone calling, and other activities associated with a mail survey, that so much usable data was generated. The time she spent pasting labels, stuffing envelopes, logging returns, following up on nonreturns, etc., was of considerable magnitude. Without her careful attention to details, the study might have been much harder to create.

In general, all large studies owe their completion and success to the dedicated work of a small group of conscientious workers. As might be expected, this study is no exception to that rule, except that the group consists of only one person, Mr. Fred Dagenais. Without his performance this study would not have been completed. Mr. Dagenais participated in the writing of the questionnaire, he aided Mrs. Wong during the mail survey and, finally, he conducted all of the card punching and computer work required for this report. Unfortunately, he has not been paid for the long hours he has worked on this project. My gratitude is immense and I thank him for his great, generous contributions which are expressed throughout this report and in the two appendices written in journal article form.

Essentially, the same statements apply to Mr. Thomas

Little who served as typist for the project. Since financial support appeared to vanish during the mail survey Mr. Little, along with Mr. Dagenais, contributed his services free of charge to the completion of this project.

Finally, special thanks go to the students who took the time to complete the questionnaires and returned them for analysis. Also special thanks go to the parents contacted over the telephone who prodded some of their offspring to return the questionnaires. Lastly, thanks go to anyone else who contributed to this project and whose names I may have omitted.

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Chapter One: Past History
and Statement of the Problem.

1-1. History of School Desegregation in Berkeley, California.

School desegregation is the law of the land. It was elevated to this position by the United States Supreme Court in April 1954 and it has been enforced and defended by the lower courts ever since, mainly on the insistence of private citizens demanding equal and quality education for their children. Rarely has a school district moved toward an acceptance of a school desegregation program without orders and directives from the courts. One major exception to this mode is provided by the Berkeley Unified School District of California. In 1962 the School Board of this northern city named a group of 36 individuals from education, business, social services, the church, and the lay community and asked them to make a study of the effects of de facto segregation upon the education of its youth and to make specific recommendations to improve education based on the findings of their study. As expected, the lay committee found that the effects of de facto segregation were harmful to equal and quality education. As a result, a number of recommendations were made on the basis of their findings. These recommendations were printed in a report edited by Dr. J. S. Hadsell and titled "De facto Segregation in Berkeley Public Schools."(3) One of the recommendations made in the report was that the junior high schools of the community should be desegregated by a redrawing of the school boundary lines. This recommendation was accepted by the School Board and in September 1964 students in the three junior high schools of the community entered desegregated eighth, ninth, and tenth grades. The history of this program has been described by Marascuilo,(4) Marascuilo and Penfield,(6) and Coleman.(2)

1-2. Student Attitudes Following One Year in the Desegregated Junior High Schools.

Near the end of the first year of the desegregation program, the principal investigator was asked by the School Board to make a survey of the student's attitudes toward the reorganization program. With the help of school teachers and administrators, the following questionnaire was prepared.

Berkeley Unified School District
June 2, 1965
Student Questionnaire

We are trying to find out how the 7th, 8th, and 9th Grade students in Berkeley feel about the new Secondary School Plan. You can help us by answering these questions. You do not need to sign your name.

FIRST, WE WOULD LIKE TO KNOW WHERE YOU HAVE GONE TO SCHOOL.

1. Where did you go to school last year? (Write the name of the school.)

____

2. How many different schools have you attended in Berkeley? Write the name of the last school you went to on Line a. Then write the name of the school you went to before that on Line b. If you went to another school in Berkeley before that, write the name of that school on Line c, etc. Be sure you are listing the schools in BACKWARD ORDER.

a.______________ e.______________
b.______________ f.______________
c.______________ g.______________
d.______________ h.______________

3. Which grades have you attended in Berkeley schools? (Circle the numbers of all the grades you have attended in Berkeley Schools.)

Kindergarten 1 2 3 4 5 6 7 8 9

4. Have you ever gone to school in some other town? (Circle NO or YES. If your answer is YES, write the name of the town in the blank.)

NO I have not gone to school in any other town.

YES I have gone to school in another town. The name of that town is: ______________

NOW WE WOULD LIKE TO KNOW HOW YOU FEEL ABOUT YOUR SCHOOL THIS YEAR.

5. How well do you like the school you are attending this year? Do you like it more, the same or less than the one you attended last year? (Circle your answer.)

MORE THE SAME LESS

6. Do you think the work in school this year is harder, the same or easier than it was last year?

HARDER THE SAME EASIER

7. How hard do you thin, it is to get good grades this year? Do you think it is harder, the same or easier than it was last year?

HARDER THE SAME EASIER

8. Is getting to school this year harder, the same or easier than last year?

HARDER THE SAME EASIER

9. How do you like your teachers this year? Do you like them more, the same or less than the teachers you had last year?

MORE THE SAME LESS

10. How do you like the counseling program in your school this year? Do you think it is better, the same or worse than the counseling program in your school last year?

BETTER THE SAME WORSE

11. What school activities (like athletic teams, clubs or Student Council) were you in last year and what activities are you in this year?

Activities I was in LAST year	Activities I am in THIS year
______________________________	______________________________
______________________________	______________________________
______________________________	______________________________
______________________________	______________________________

NEXT WE HAVE SOME QUESTIONS ABOUT YOUR CLASSMATES.

12. Are your classmates the same this year or are there many new ones?

ALMOST ALL THE SAME SOME NEW ONES ALMOST ALL NEW

13. How do you get along with your classmates this year? Do you get along with them better, the same or worse than last year?

BETTER THE SAME WORSE

14. Are there students of various races (Negro, White, Oriental) in most of your classes this year?

YES NO

15. Is there a different mixture of students of various races in your classes this year? Is the mixture greater, the same or less than last year?

GREATER THE SAME LESS

16. Do Negro and White students mix and talk to each other at your school?

OFTEN SOMETIMES HARDLY EVER

17. Do White and Oriental (Chinese or Japanese) students mix and talk to each other at your school?

OFTEN SOMETIMES HARDLY EVER

18. Do Negro and Oriental students mix and talk to each other at your school?

OFTEN SOMETIMES HARDLY EVER

19. How many new friends have you made in your classes this year?

MANY SOME NONE

20. Do you have any new White friends?

MANY SOME NONE

21. Do you have any new Negro friends?

MANY SOME NONE

22. Do you have any new Oriental (Chinese or Japanese) friends?

MANY SOME NONE

NOW WE WOULD LIKE TO KNOW IN YOUR OWN WORDS WHAT YOU THINK OF THE NEW SECONDARY SCHOOL PLAN

23. Please use the space below (and the back of the page if you need to) to tell us more about the new 7th, 8th and 9th Grade Plan. What do you think are some of the good things about it? What do you think are some of the bad things about it?

____

____

____

____

____

NOW WE WOULD LIKE TO KNOW A LITTLE ABOUT YOU

24. How old are you? (Circle your age.)

11 12 13 14 15 16 17

25. Are you: BOY or GIRL (Circle your answer.)

26. Are you: (Circle your answer.)

NEGRO WHITE MEXICAN ORIENTAL
(Japanese or Chinese)

27. Where were you born?

____________________ (Write the name of the town)
____________________ (Write the name of the state or country if you were not born in the U. S.)

28. Where did you live during most of your childhood? (Put an "X" beside your answer.)

_____On a farm

_____In a small town

_____In a small city, about the size of Berkeley

_____In a large city, like Oakland or San Francisco

_____Don't know

FINALLY, WE WOULD LIKE TO KNOW WHAT PART OF BERKELEY YOU LIVE IN

29. Please fill in the blanks with the name of the street you live on and the name of the nearest cross street. (Do not put down your address.)

What street do you live on?____________________

What is the nearest cross street?____________________

The End

Thank You!

This questionnaire was administered to all 7th, 8th, and 9th grade students of the school district. One of the schools, Burbank Junior High School, housed only 9th grade students. One of the junior high schools, Garfield, had both 7th and 8th grade students. Half of the 8th grade students had been 7th grade students at Burbank Junior High School during the previous year. To achieve the school desegregation objectives, these two schools had their boundary lines changed. Prior to the reorganization, Burbank was mainly Negro while Garfield was mainly Caucasian. The third school of the district, Willard, was not directly involved with the reorganization since it was already integrated. While Garfield was a 7th and 8th grade school, Willard housed a residual 9th grade class in addition to its 7th and 8th grade classes. However, after the second year it, too, like Garfield, housed only 7th and 8th grade students.

The results of the survey were reported by Marascuilo(4). In essence, it was noted that students seemed to react to school, teachers, counselors, and their classmates very much as they would have, at the same age, in another year. Though opinions were divided, there was a majority of support for the change. Indeed, it would be difficult to attribute the attitudes expressed directly to the changes. Results for some of the more important questions are reported in Table 1-2.1 and are discussed briefly below. In evaluating the responses, "this year" refers to the school year 1964-65, the first year under reorganization; whereas "last year" refers to 1963-64, the year before reorganization. In these terms:

Item 5. How well do you like the school you are attending this year? About 60 percent of the students at Willard liked school more this year than last year. At Garfield and West Campus the corresponding percentages were about 45 and 55 percent. Since Willard was not involved in the student population shifts, and since approximately 60 percent of Willard students liked the school they were attending more than the school they attended the previous year, it must be concluded that West Campus students showed about the same level of satisfaction while students at Garfield were quite dissatisfied. One reason for the Garfield dissatisfaction was mentioned repeatedly by the students in the open end question on the questionnaire was the over-crowded condition of the school which apparently placed much strain on both teachers and students.

Item 7. How hard do you think it is to get good grades this year? At Willard about 75 percent of the students thought it was harder. The corresponding percentages at Garfield and West Campus were about 75 and 65 percent respectively.

Item 9. How do you like your teachers this year? At Willard about 50 percent liked their teachers more, while at Garfield about the same percentage of students liked their teachers more. At West Campus about 60 percent liked their teachers more than the previous year. Since the percentages at West Campus and Garfield were equal to or higher than the percentage for Willard, it would suggest that the reorganization plan did not strongly affect the students' attitudes concerning their teachers.

Item 10. How do you like the counseling program in your school this year? About 60 to 65 percent of the students at each of the three schools thought that the counseling program was better than what it was the previous year. Since these percentages were about the same at all three schools, it would suggest that the reorganization plandid not strongly affect the students' attitudes toward the counseling program.

Item 13. How do you get along with your classmates this year? At all three schools about 60 percent of the stu-

Table 1-2.1. Responses to 1965 Questionnaire by School.

		Willard		Garfield		West Campus	
Item	Response	Number	Percent	Number	Percent	Number	Percent
5.	More	519	59	602	43	335	53
	Less	356	41	809	57	301	47
	Total	875	100	1411	100	636	100
7.	Harder	651	74	1059	75	416	66
	Easier	225	26	352	25	219	34
	Total	876	100	1411	100	635	100
9.	More	447	51	700	51	362	58
	Less	426	49	687	49	262	42
	Total	873	100	1387	100	634	100
10.	Better	500	62	883	65	374	61
	Worse	312	38	486	35	242	39
	Total	812	100	1369	100	616	100
13.	Better	533	62	847	62	378	62
	Worse	334	38	531	38	237	38
	Total	867	100	1378	100	615	100
16.	Often	390	45	457	33	284	46
	Sometimes	386	45	723	52	278	45
	HardlyEver	87	10	194	15	55	9
	Total	863	100	1374	100	617	100
17.	Often	682	79	991	72	461	75
	Sometimes	157	18	352	26	143	23
	HardlyEver	24	3	43	4	15	2
	Total	863	100	1386	100	619	100
18.	Often	241	28	335	24	181	29
	Sometimes	412	48	714	52	313	51
	HardlyEver	196	24	322	24	118	20
	Total	849	100	1371	100	612	100

dents got along better with their classmates. Again, it would appear that the reorganization plan had little affect in changing students' attitudes toward getting along with one another.

Item 16. Do Negro and White students mix and talk to each other at your school? At all three schools more than 85 percent of the students perceived some mixing and talking between Negro and White students.

Item 17. Do White and Oriental students mix and talk to each other at your school? More than 95 percent of the students at all school perceived some mixing and talking. Thus, it appears that almost all students perceive social integration of Orientals and Whites.

Item 18. Do Negro and Oriental students mix and talk to each other at your school? More than 75 percent of the students at all three schools perceived mixing among Oriental and Negro students.

As this brief survey of the responses indicates, attitudes across the schools with respect to the reorganization plan were quite uniform and for the most part favorable toward the reorganization plan.

1-3. Student Attitudes Following Two Years in the Desegregated Junior High Schools.

Following the second year of the program, the principal investigator was again asked to conduct a survey to determine what changes in attitude had occurred over the past school year. This survey included 7th, 8th, 9th, and 10th grade classes. The questionnaire used at the second year is as follows.

Berkeley Unified School District

June 1, 1966

Student Questionnaire

We are trying to find out how the 7th, 8th, 9th, and 10th Grade students in Berkeley feel about their Schools. You can help us by answering these questions. You need not sign your name.

FIRST, WE WOULD LIKE TO KNOW A LITTLE ABOUT YOU.

1. In which part of Berkeley do you live? Please write the number in this space__________

(Map, with Census Tracts numbered was appended.)

2. How old are you? (Circle your age.)

11 12 13 14 15 16 17 18

3. Are you: BOY or GIRL (Circle your answer.)

4. Are you: (Circle your answer.)

NEGRO WHITE ORIENTAL MEXICAN OTHER (What)

RATHER NOT SAY

We would like to know about the school you went
year and the school you go to this year.

NOW, WE WOULD LIKE TO KNOW ABOUT THE SCHOOL YOU WENT
YEAR

5. Where did you go to school last year?

1. Garfield
2. West Campus
3. Willard
4. Elementary School in Berkel
5. Private School in Berkeley
6. I did not go to school in
7. Other

6. How well did you like the school you attended las

VERY WELL FAIRLY WELL NOT VERY WELL NOT AT

7. How hard did you find the work in school last yea

VERY HARD FAIRLY HARD FAIRLY EASY VERY EASY

8. How hard was it to get to school last year?

VERY HARD FAIRLY HARD FAIRLY EASY VERY EASY

9. How well did you like your teachers last year?

VERY WELL FAIRLY WELL NOT VERY WELL NOT AT

10. How well did you like the counseling program in y
school last year?

VERY WELL FAIRLY WELL NOT VERY WELL NOT AT

WE DID NOT HAVE A COUNSELING PROGRAM LAST YEAR

11. How did you get along with your classmates last y

VERY WELL FAIRLY WELL NOT VERY WELL NOT AT

12. Did Negro and White students mix and talk to each
other at your school last year?

VERY OFTEN FAIRLY OFTEN NOT VERY OFTEN NOT

13. Did White and Oriental (Chinese or Japanese) students mix and talk to each other at your school last year?

VERY OFTEN FAIRLY OFTEN NOT VERY OFTEN NOT AT ALL

14. Did Negro and Oriental students mix and talk to each other at your school last year?

VERY OFTEN FAIRLY OFTEN NOT VERY OFTEN NOT AT ALL

15. Did you make many new friends in your classes last year?

MANY SOME NOT VERY MANY NONE

16. Did you make any new White friends last year?

MANY SOME NOT VERY MANY NONE

17. Did you make any new Negro friends last year?

MANY SOME NOT VERY MANY NONE

18. Did you make any new Oriental friends last year?

MANY SOME NOT VERY MANY NONE

NOW WE WOULD LIKE TO KNOW HOW YOU FEEL ABOUT YOUR SCHOOL THIS YEAR.

19. How well do you like the school you are attending this year? Do you like it more, the same or less than the one you attended last year?

MORE THE SAME LESS

20. Do you think the work in school this year is harder, the same or easier than it was last year?

HARDER THE SAME EASIER

21. Is getting to school this year harder, the same or easier than last year?

HARDER THE SAME EASIER

22. How do you like your teachers this year? Do you like them more, the same or less than the teachers you had last year?

MORE THE SAME LESS

23. How do you like the counseling program in your school this year? Do you think it is better, the same or worse than the counseling program in your school last year?

BETTER THE SAME WORSE WE DID NOT HAVE A COUNSELING PROGRAM LAST YEAR

24. How do you get along with your classmates this year? Do you get along with them better, the same or worse than last year?

BETTER THE SAME WORSE

25. How often do Negro and White students mix and talk to each other at your school this year?

MORE THAN LAST YEAR SAME AS LAST YEAR LESS THAN LAST YEAR

26. How often do White and Oriental students mix and talk to each other at your school this year?

MORE THAN LAST YEAR SAME AS LAST YEAR LESS THAN LAST YEAR

27. How often do Negro and Oriental students mix and talk to each other at your school?

MORE THAN LAST YEAR SAME AS LAST YEAR LESS THAN LAST YEAR

28. Are your friends this year the same ones you had last year?

ALL THE SAME MOST THE SAME NOT MANY THE SAME NONE THE SAME

29. How many new friends have you made in your classes this year?

MANY SOME NOT VERY MANY NONE

30. Did you make any new White Friends this year?

MANY SOME NOT VERY MANY NONE

31. Did you make any new Negro friends this year?

MANY SOME NOT VERY MANY NONE

32. Did you make any new Oriental friends this year?

MANY SOME NOT VERY MANY NONE

NOW WE WOULD LIKE TO KNOW IN YOUR OWN WORDS WHAT YOU THINK OF YOUR SCHOOL.

33. Please use the space below to tell us more about your school this year.

1.	Is there anything you especailly LIKE about your school this year?	1.	Is there anything you especailly DISLIKE about your school this year?
	YES NO		YES NO
2.	If "yes," What do you especially LIKE. Please list below.	2.	If "yes," what do you especially DISLIKE. Please list below.

The results of the survey were reported by Marascuilo and Levin(5). In this second report, it was noted that generally, students' reactions to the school reorganization, as well as to teachers, counselors, and classmates were more positive than reactions the previous year. The analysis by schools showed that students' attitudes to the reorganization plan moved toward a more favorable position during the second year of the implementation of the plan with respect to their attitude the previous year. More students seemed to like both school and classmates better. A fairly large percentage, about two-thirds, reported more mixing between students of various races. An analysis of attitudes by grades and by race showed that the attitudes of White students remained positive or else improved; the same is true of Negro students, though they showed more dissatisfaction with school, teachers and counseling programs than Whites. But it should be emphasized that their attitudes this second year were generally more positive than the previous year. Results for some of the important questions are discussed below.

Item 19. How well do you like the school you are attending this year? At each of the four schools, more than 50 percent of the students said that they liked school better than they did the previous year. However, at Willard the total percentage was six percent below the first year figure. At Garfield, it was eight percentage points higher and at West Campus it was 12 points higher. This item by itself is of considerable interest because during the first year of the reorganization, many students at Garfield were somewhat dissatisfied with school, with most of the dissatisfaction centered among the 8th grade students. These students at the second testing were enrolled at West Campus and showed greater liking for school than did the students at the remaining three schools. Of secondary interest is the relatively high figure of 63 percent for the 10th grade Berkeley High students. For the most part these students were at West Campus last year, and at that time 53 percent reported that they liked school better the year before. This might reflect the greater freedom of activity, or the more interesting curriculum of high school, or it might reflect the

Table 1-3.1. Responses to the 1966 Questionnaire by School.

		Willard		Garfield		West Campus		Berkeley High	
Item	Response	No.	%	No.	%	No.	%	No.	%
19.	More	436	53	731	51	426	65	561	63
	Less	381	47	681	49	225	35	313	37
	Total	817	100	1412	100	651	100	874	100
20.	Harder	607	73	1066	75	438	67	706	79
	Easier	208	27	328	25	211	33	178	21
	Total	815	100	1394	100	649	100	884	100
22.	More	421	51	688	48	390	59	462	52
	Less	383	49	691	52	259	41	402	48
	Total	804	100	1379	100	649	100	864	100
23.	Better	312	53	515	62	418	68	441	52
	Worse	280	47	309	38	190	32	401	48
	No Program	199		533		39		24	
	Total	791	100	1357	100	647	100	866	100
24.	Better	546	66	967	68	461	70	579	65
	Worse	262	34	429	32	187	30	300	35
	Total	808	100	1396	100	648	100	879	100
25.	More	535	65	928	65	478	74	590	66
	Less	253	35	434	35	168	26	262	34
	Total	788	100	1362	100	646	100	852	100
26.	More	557	67	968	68	433	67	554	62
	Less	232	33	398	32	208	33	287	38
	Total	789	100	1366	100	641	100	841	100
27.	More	437	53	743	52	385	60	453	51
	Less	341	47	608	48	254	40	357	49
	Total	778	100	1351	100	639	100	810	100

better rapport with classmates and teachers. As one student suggested, "The student body has a more unified feeling. There is more regard for individualism."

Item 20. Do you think the work in school this year is harder or easier than last year? These percentages are almost identical to the percentages reported last year and thereby suggest that teachers' academic expectations of students have not been affected by the reorganization.

Item 22. How do you like your teachers this year? Responses to this question are apparently quite stable over time for they are almost equal to the figures reported the previous year. As previously, teachers at West Campus were liked best.

Item 23. How do you like the counseling program in your school this year? Except for the students at Willard, the reported percentages are about the same or statistically higher than the previous year. In 1965, 62 percent of the students at Willard thought that the counseling program was better. In 1966, only 53 percent thought it was better. About the same percentage is reported for Berkeley High. One student at Garfield said, "Our counselors are eager and anxious to help the students."

Item 24. How do you get along with your classmates this year? At all four schools about 65 to 70 percent of the students got along better with their classmates. This is significantly higher than the 60 percent figure of the previous year. If one of the objectives of the reorganization plan was to effect better relations among students, these figures would suggest that it has done this to some degree.

Item 25. Do Negro and White students mix and talk to each other at your school? Because of the way this questionnaire was worded, it was not possible to compare the responses of this question to the corresponding question for the previous year. Even so, there appears to be a significant amount of social mixing between White and Negro students. Approximately two-thirds of the students reported more mixing than that observed during the previous year. A student at Willard reported that he liked "the way some people are trying to make new friends," while a student at West Campus stated, "I am surprised the Ramsey Plan worked so well. I was entirely against it because I was afraid of Negroes. Now with a more open mind I have a lot of Negro friends."

Item 26. Do White and Oriental students mix and talk to each other at your school? As can be seen, the percentages across the four schools are quite uniform. About two-thirds of the students reported that White and Oriental students mixed more than they did the previous year.

Item 27. Do Negro and Oriental students mix and talk to each other at your school? Sixty percent of the students at West Campus reported more mixing among Negro and Oriental students while at the other schools about half of the students reported more mixing.

As this brief survey suggests, students' attitudes had moved toward a more positive position during the second year than they had held during the first year of the reorganization plan. More students liked school better and more liked their classmates better. A fairly large percentage reported more mixing between students of various races.

The students who participated in the 1965 and 1966 study were seniors in 1969-1970. While they have aged, they have also developed and matured in their outlook on the social problems involved with education in an integrated school. These students are the subjects for this follow up research. The aim of the present research is to study the attitudes and feelings of these students toward school integration and to compare the analysis of their responses with the findings of the 1966 evaluation. The significance of the present study is clearly evident.

The decisions and actions made to reduce racial imbalance in the Berkeley Schools are recommendations that are certain to be proposed in the future in other American cities. Some of these recommendations have broad social significance for education in general. Some of the recommendations have to do with changing school boundaries, increased counseling services to minority groups, changes in ability groupings, etc. Modifications in any of these areas are going to produce certain repercussions throughout the community in general and attitudinal changes are going to be registered in the students' attitudes toward school integration and reorganization. This study can supply some information on the student feeling toward integrated schools in the Berkeley area over an extended period of time. What is true of this community is not necessarily going to be true of any other American city, but what is known about this community concerning the attitudes of students toward school integration can be of significant utility to educators in other cities who face similar problems.

Chapter Two: Design of the Study and Statistical Procedures.

2-1. Original Design of the Study.

The original plans for this study could not be followed because of a number of unexpected events that occurred prior to the target date for testing the subjects. When the study was planned, it was decided to review the 1966 questionnaire reproduced in section 1-3. On the basis of the review a new questionnaire containing about 50 items was to be prepared in cooperation with social studies teachers at Berkeley High School. The teachers were employed, and a discussion of the objectives was held. When these objectives were understood the principal investigator and his assistants met with the teachers for about five weeks during the months of April and May in 1970. Meetings were held two and sometimes three times per week, often extending over three continuous hours of questionnaire writing and discussion. Each question was evaluated and its meaning and value to the study and to the teachers of the school district were examined. In a short time, it became quite clear that the teachers did not think much of the original plans to ask about 50 questions which, to them, appeared to be paliative in nature and not directed to the actual experiences of the students and what the teachers perceived to be the problems and realities in the integrated school setting. At first the principal investigator tried to steer the teachers back to a simple, short questionnaire, but with the persuasiveness of their arguments and with their desire to make the results meaningful to their fellow teachers, they were allowed to win. As a result, the number of questions grew like Topsey.

Because of this change in plans, it became evident that it would be impossible to ask each student to answer all questions in a forty minute social studies class period. Thus, the original testing plan had to be reformulated. In its place it was decided to write three separate questionnaires which would be somewhat nonoverlapping in their coverage of the integrated school experience. The questionnaires so developed are presented in the appendix of this report. A careful examination of the items shows that there is some overlap, but, for the most part, the questionnaires are mutually exclusive in the coverage of the students' activities over the last six years of the school period. Questionnaire A focussed on student friendships, social interaction with students of the same and different races, student aggression and encounters with physical force and extortion, and how much certain school programs helped foster student integration. Questionnaire B asked students to react to classroom teaching activities and the feelings teachers had about instruction in integrated classes. Questionnaire C involved a study of drugs and interracial sex and the effects of student activism upon the integration program. As is apparent, an analysis of these topics constitutes a major change in direction from that originally planned for the study. However, it seemed worth while to have the teacher's cooperation and their first hand experiences in the integrated school in preparing the questionnaires. Also, it was quite obvious to the investigators that very little published research has examined many of the areas covered in the questions and as a result, the findings at this one school would be quite unique and of value to other researchers if published and distributed throughout the general education community. While it is true that Berkeley High School represents a certain type of school environment, it was believed that the findings could be given some generalization across other similar schools.

Upon completion of the questionnaires and their printing, it was decided to test all students in their social studies classes during the second to last week of the school year. By performing the testing during this week of school, it was felt that almost all students could be tested and that sufficient time would be available to obtain information from students who happened to be absent on the test date. So as to keep absenteeism to a minimum, a number of paid advertisements were run in the Yellow Jacket, the school paper. In the ads, students were informed of the project, the date of its execution, and the importance it had for future students in the school system. In addition, they were urged to "tell it like it is."

These plans were progressing in orderly fashion when a large bomb burst in Asia that reverberated through the halls of Berkeley High School and most other educational institutions across the country. When American troops moved into Cambodia it proved to be the straw that broke the camel's back. As it was, students had been already stirred by the murders that had taken place at Kent State University in Ohio. Most students cut classes and began to demonstrate in large numbers against President Nixon's actions. Reconstitution meetings were called, seminars developed, some students took a vacation, and some students organized and worked on projects that expressed their dislike of the existing military situation. To attempt an in-school testing of all students was impossible and on the recommendation of the school principal, the project came near to being scrapped.

2-2. The New Study as a Mail Survey.

Once the school disruptions were reduced, it was suggested by the principal investigator, or his assistants, or the teachers that the printed questionnaires be mailed to the students and that the study be revitalized. As this suggestion was examined the principal investigator, on the basis of other work performed by him, thought that the nonresponse rate among poor readers would be so exceedingly high as to make the study useless. Since it was known that the poor readers would tend to be Black, obvious biases in responses were evident. However, it was felt that, because a lot of work and money had gone into the preparation of the questionnaire, something would be gained by trying a mail survey.

As a result, a dollar estimate was made of the cost that a mail survey would entail. A formal request was sent to the San Francisco branch of the Office of Education telling of the problem and requesting extra funds to carry out a mail survey. The funds were granted and so the mail survey was inaugurated.

The Berkeley Unified School District supplied IBM type mailing address labels for all students in the graduating class. Envelops were prepared, names were coded to keep track of respondents and nonrespondents, and the first wave of questionnaires were sent out to the students on June 22, 1970. Follow up letters were mailed to nonrespondents on July 8, 1970 and July 31, 1970. With each follow up letter another questionnaire was sent to the student in case the originally mailed questionnaire had become lost or misplaced. Since three different questionnaires had been prepared, questionnaire forms were assigned in alphabetical order. Form A went to the first student on the alphabetized school roster. Form B went to the second listed students, with Form C going to the third listed student. The process was then repeated for students four, five, and six, on the roster, and the process was then repeated across each group of three consecutive names. One major exception to this assignment rule was made for the Asian students. Since it was known that the school contained approximately 10 percent students with Asian surnames, it was decided to send all of these Form A only. Thus, as their name appeared on the roster, they were sent Form A and the student directly after them on the list was sent the questionnaire that normally would have gone to them. With this assignment, questionnaires were distributed as shown in Table 2-2.1 and in Table 2-2.2.

As can be seen, among the January graduates, the response rate is given by $p = 115/289 = .40$. Among the males, the response rate equals $p_M = 38/117 = .32$, while among the females the corresponding figure is given by $p_F = 77/172 = .45$. Neither response rate is very high. From the telephone follow up it appears that many of the graduates were no longer in Berkeley and that a fair percentage of the males had been drafted into, or had joined, the armed forces.

Response rates among the June graduates are slightly, but not significantly, higher than for the January graduates. The overall response rate is given by $p = 455/815 = .56$, with the male response rate given by $p_M = 238/450 = .53$ and the female response rate given by $p_F = 217/365 = .59$. Information on race was available for the June graduates. As can be seen, the response rates for the Asians, Blacks, and Whites are given respectively by $p_A = 74/95 = .78$, $p_B = 149/338 = .44$, and $p_W = 232/382 = .61$. The group with the lowest response rates consists of the Black males. For them $p_{BM} = 72/174 = .42$. The group with the highest response rate consists of the Asian females. For them, $p_{AF} = 36/45 = .80$.

When interpreting the reported statistics, the biases

Table 2-2.1. Degrees of Response for January Graduates and Students in the Continuation School According to Sex of the Student and Questionnaire Form at First Mailing.

	Male			Female		
	Form A	Form B	Form C	Form A	Form B	Form C
Returned	11	7	20	31	24	22
No Return	32	28	19	34	30	31
Total	43	35	39	65	54	53

Table 2-2.2. Degree of Response for June Graduates According to Sex and Race of the Student and Questionnaire Form at First Mailing.

		Male			Female		
Race		Form A	Form B	Form C	Form A	Form B	Form C
	Returned	38			36		
Asian	No Return	12			9		
	Total	50			45		
	Returned	23	27	22	26	21	30
Black	No Return	40	29	33	32	28	27
	Total	63	56	55	58	49	57
	Returned	41	47	40	33	34	37
White	No Return	36	32	30	19	17	16
	Total	77	79	70	52	51	53

entailed in nonresponse must be considered. For Asians, the bias is most likely minimal and so their responses can be accepted at face value. Among the Blacks and Whites, and especially among the Blacks, some accomodations in interpretations are required. Since the responses are quite favorable toward the integration program, it is easy to assume that the nonrespondents tended to dislike their training in the integrated school. Unfortunately, the individual who makes such an assumption has little to defend his position except that it is his opinion. The same is true for an individual who assumes the opposite. Not even this position is entirely defensible. The authors tend to believe that the poor response rate is not an indication of dislike of the school system and its integration but, rather, a lack of interest in completing the long questionnaire received through the mail. Many students who took the time to respond thought that the information was of no real interest to the school administration or that the questionnaire was biased and of no value. Also, it must be noted that many students, especially Black males, are functionally nonreaders. Many cannot read beyond a sixth grade reading level and many more refuse to read even if they can. Certainly these two factors contribute to the high nonresponse rate for them. Finally, it is quite clear that a large number of students departed from Berkeley immediately after graduation; this was especailly true of the high SES Whites. A remarkable number of them were reported by family over the telephone to be traveling in Europe and a surprising number were reported as entering the armed forces. Thus, it is the author's belief that the high level of nonresponse is not indicative of dislike of the integration program but of nonavailability of students and the general lack of interest in reading, completing, and mailing back of a questionnaire to an inquisitive professor doing research and not having genuine interest in students' feelings and attitudes.

Since the response rates were expected to be quite low, it was further decided to send extra questionnaires to graduates who returned their first mailed questionnaire. For example, if a student who received Form B returned a completed questionnaire, he was sent the next form inthe series, Form C, and asked to complete and return it. If he did this, he was then sent Form A and was asked to complete it and return it. Many of the graduates did this. The total number of returned questionnaires of each form are as reported in Table 2-2.3.

Unfortunately, this procedure proved to be exceptionally expensive. In fact, the cost of mailing the questionnaires and the follow-up letters, along with the salaries of the involved personnel, was so high that they absorbed over half of the grant money and so compromises in data analysis had to be made.

2-3. Original Data Analysis Plans.

Once the data was collected, the original plans were to spend the months of June, July, and August of 1970 doing library research on related studies. This plan was dropped because

Table 2-2.3. Number of Completed Questionnaires.

	Form A	Form B	Form C
Returned Original Form	228	160	171
Returned Second and Third Forms	100	141	124
Total	328	301	295

the employees were forced to spend all of their working time keeping records, stuffing envelopes, telephoning nonrespondents, and carrying out all the other activities that a mail survey entails. Thus, the time available for library research was essentially nonexistant.

When it came to data analysis, the original plans were to perform a number of multivariate analysis of variances on the complete set of questionnaires, along with the corresponding linear discriminant analyses, principal component investigations, and post hoc comparisons. Since the questionnaires were to have been completed in the classroom setting, students were to have been told that all questions had to be answered and that if there were any doubts concerning the meaning of a question they would be given clarification upon request at their desk by an assistant. Since the questionnaire went through the mails, most questionnaires contained a large amount of missing data because students failed to answer many of the questions. This meant a large amount of time and money was required to get the data in a clean enough form so that multivariate programs could be used to analyze the data. For multivariate procedures missing data is a serious problem. None of the programs available to the principal investigator allow one to perform a test with incomplete data. The study of Dr. Neil Timm(8) clearly shows that ignoring missing data in a multivariate model leads to serious errors in the resulting statistical test and for that reason is to be avoided at all costs. Naturally, the costs involved in cleaning the data were also prohibitive. By the time the data was ready for analysis the remainder of the U. S. Office of Education grant funds had been spent.

2-4. Data Analysis Procedures Finally Performed.

Approximately $1,000 in free computer time was obtained through the Department of Education of the University of California from the Computer Center. Another $500 was granted by the Campus Research Committee to cover the cost of preparing the final manuscript for Xeroxing. Mr. F. Dagenais agreed to work on the data analysis without payment and Mr. Thomas Little agreed to type the final report, also without pay. So as to keep their work to a minimum, it was decided to examine only the questions that were related to items appearing on the 1966 questionnaire for comparison purposes with the 1970 questionnaire and to reduce the scope of the analysis only to race, sex, and socioeconomic status as determined by 1960 Census data and as described by Marascuilo(4) and Marascuilo and Penfield(6).

Thirty-four questions were identified on Form A as being similar to, related to, or identical to items of the 1966 questionnaire. Twelve questions were identified on Form B, and three questions were identified on Form C for investigation. The Form A items were submitted to a principal component analysis. Ten components were identified with eigen values exceeding one in value. These ten components explained 69.6 percent of the total variance. They were then submitted to a varimax factor rotation and grouped into four sets of factors. Each set was submitted to a multivariate analysis of variance across race, sex, and socio-economic status. Nested comparisons were made across race and sex within the three levels of SES. Any multivariate F ratio exceeding the $\alpha = .01$ significance level was submitted to a post hoc investigation using the Roy simultaneous confidence interval method.(7) Any significant linear discriminant function was then submitted to a Scheffé type post hoc comparison to identify various sources of significant differences. The questions of Forms B and C were analyzed in exactly the same manner, except that no principal component analysis was performed on the data prior to the multivariate investigation.

Finally, two short investigations were performed upon students' involvement with school activism and on the meaning of integration. These two short papers appear as appendices to this report.

Chapter Three: Analysis of Selected Questions Appearing on Form A.

3-1. Factor Analysis of 34 Questions Appearing on Form A.

Of the more than 150 questions contained in form A, 34 were identical to, similar to, or related to ones appearing on the questionnaire of 1966. These 34 items, listed in Table 3-1.1, were factor analyzed. This preliminary analysis was performed to determine which items could be grouped statistically and mathematically together and to achieve a possible reduction of variables and data. To attain these goals a principal component analysis with unities in the main diagonal was performed on the 34 item correlation matrix. From these mathematically defined factors, an attempt was made to generate meaningful factors by application of a varimax rotation on the factors with eigen values greater than 1. The original correlation matrix for the 34 items is presented in Table 3-1.2 with the results of the varimax rotation presented in Table 3-1.3. As will be seen, most of the ten resulting factors appear to be interpretable as defined by items with the largest weightings. Generally, such a clear alignment of items is not encountered with survey data of this nature. When it does occur, a researcher has some reason to believe that the data possess some degree of reliability and, along with face validity, some actual validity.

Before evaluation of the resulting factors, it will be useful to examine the significant correlational relationships that exist in the correlation matrix of Table 3-1.1.

Since this correlation matrix is based upon 561 different correlation coefficients, Type I error control at $\alpha \leq .01$ requires that each correlation be inspected at $\alpha_0 \leq .01/561 = .000018$. For large sample size this corresponds to an approximate normalized Z value of $Z \geq 6$ and a correlation coefficient of $r \leq -.33$ or $r \geq .33$ or $r^2 > .10$. Thus, only correlations explaining 10 percent of the variance are examined in any detail. Of the 561 correlations, 59 are statistically significant.

1. Item 14a is positively correlated with items 14b and 14c. These items measure student's perception of interracial social mixing during the junior high school period. While the correlations are not large, they do indicate a consistency of response across the three types of interracial social interactions. Item 14b shows some positive correlation with 16b. Both of these items relate to Asian and White mixing in junior and senior high school.

2. Questions 15, 17, 18, and 19 intercorrelate with

Table 3-1.1. Items of Form A That Were Identical to, Similar to, or Related to the Items of the 1966 Questionnaire.

14. Think back to when you were in JUNIOR high school (7th, 8th, and 9th grade). How often did students mix and talk to each other, if the students were:

14a Asian and Black?	VERY OFTEN	OFTEN	NOT VERY OFTEN	NEVER
14b Asian and White?	VERY OFTEN	OFTEN	NOT VERY OFTEN	NEVER
14c Black and White?	VERY OFTEN	OFTEN	NOT VERY OFTEN	NEVER

15. During your JUNIOR high school years, how many friends did you make that were:

	(11 or more)	(6-10)	(3-5)	(1-2)	(0)
15a Asian?	VERY MANY	MANY	SOME	FEW	NONE
15b Black?	VERY MANY	MANY	SOME	FEW	NONE
15d White?	VERY MANY	MANY	SOME	FEW	NONE

16. When you were in SENIOR high school (10th, 11th, and 12th grade) how often did students mix and talk to each other if the students were:

16a Asian and Black?	VERY OFTEN	OFTEN	NOT VERY OFTEN	NEVER
16b Asian and White?	VERY OFTEN	OFTEN	NOT VERY OFTEN	NEVER
16c Black and White?	VERY OFTEN	OFTEN	NOT VERY OFTEN	NEVER

17. During your SENIOR high school years, how many friends did you make that were:

	(11 or more)	(6-10)	(3-5)	(1-2)	(0)
17a Asian?	VERY MANY	MANY	SOME	FEW	NONE
17b Black?	VERY MANY	MANY	SOME	FEW	NONE
17d White?	VERY MANY	MANY	SOME	FEW	NONE

18. How many CLOSE friends do you have who are:

18a Asian?	NONE	ONE	TWO	THREE OR MORE
18b Black?	NONE	ONE	TWO	THREE OR MORE
18d White?	NONE	ONE	TWO	THREE OR MORE

Table 3-1.1. (continued)

19. How many ACQUAINTANCES do you have who are:

	(11 or more)	(6-10)	(3-5)	(1-2)	(0)
19a Asian?	VERY MANY	MANY	SOME	FEW	NONE
19b Black?	VERY MANY	MANY	SOME	FEW	NONE
19d White?	VERY MANY	MANY	SOME	FEW	NONE

40. How well DID you like attending BHS?

VERY WELL WELL NOT VERY WELL NOT AT ALL

41. How well WOULD you have liked attending school each day if the school had been:

41a Mainly Asian?	VERY WELL	WELL	NOT VERY WELL	NOT AT ALL
41b Mainly Black?	VERY WELL	WELL	NOT VERY WELL	NOT AT ALL
41d Mainly White?	VERY WELL	WELL	NOT VERY WELL	NOT AT ALL

45. During your JUNIOR high school years were you ever shaken down or ripped off for money, food, books, etc., by a student who was:

	(6 or more)	(3-5 times)	(1-2 times)	(0)
45a Asian?	VERY OFTEN	OFTEN	RARELY	NEVER
45b Black?	VERY OFTEN	OFTEN	RARELY	NEVER
45d White?	VERY OFTEN	OFTEN	RARELY	NEVER

46. During your JUNIOR high school years, how often were you involved in a fight, quarrel, or argument with another student who was:

	(6 or more)	(3 to 5)	(1 to 2)	(0)
46a Asian?	VERY OFTEN	OFTEN	RARELY	NEVER
46b Black?	VERY OFTEN	OFTEN	RARELY	NEVER
46d White?	VERY OFTEN	OFTEN	RARELY	NEVER

47. During your SENIOR high school years were you ever shaken down or ripped off for money, food, books, etc., by a student who was:

	(6 or more)	(3-5 times)	(1-2 times)	(0)
47a Asian?	VERY OFTEN	OFTEN	RARELY	NEVER
47b Black?	VERY OFTEN	OFTEN	RARELY	NEVER
47d White?	VERY OFTEN	OFTEN	RARELY	NEVER

Table 3-3.1. (continued)

48. During your SENIOR high school years, how often were you involved in a fight, quarrel, or argument with another student who was:

	(6 or more)	(3 to 5)	(1 to 2)	(0)
48a Asian?	VERY OFTEN	OFTEN	RARELY	NEVER
48b Black?	VERY OFTEN	OFTEN	RARELY	NEVER
48d White?	VERY OFTEN	OFTEN	RARELY	NEVER

Table 3-1.2. Correlation Matrix for the Questions of Table 3-1.1.

Item	14a	14b	14c	15a	15b	15d	16a	16b	16c	17a	17b	17d
14a	1.00	.35*	.44*	.24	.19	.14	.27	.09	.03	.19	.04	.08
14b		1.00	.25	.30	-.09	.24	-.01	.40*	.00	.25	.01	.24
14c			1.00	.07	.22	.15	.01	-.00	.23	-.03	.08	.07
15a				1.00	.18	.54*	.09	.28	-.01	.62*	.17	.44*
15b					1.00	.04	.18	.05	.18	.06	.66*	.02
15d						1.00	.05	.18	.09	.47*	.14	.69*
16a							1.00	.35*	.49*	.25	.29	.10
16b								1.00	.36*	.35*	.20	.29
16c									1.00	.05	.30	.15
17a										1.00	.30	.57*
17b											1.00	.27
17d												1.00

Item	18a	18b	18d	19a	19b	19d	40	41a	41b	41d
14a	.15	.09	.05	.23	.06	.08	-.03	.14	.16	.10
14b	.17	-.08	.11	.27	.06	.21	.06	.07	-.07	.03
14c	-.01	.19	.12	.02	.09	.10	.06	.10	.20	.09
15a	.47*	-.02	.22	.59*	.07	.34*	.05	.06	-.21	.03
15b	.01	.54*	-.22	-.11	.48*	-.18	.16	-.10	.25	-.15
15d	.32*	-.03	.47*	.44*	.07	.60*	.01	.07	-.11	.14
16a	.15	.19	-.00	.18	.23	.07	-.02	-.08	.06	-.07
16b	.16	-.05	.08	.27	.10	.15	.05	.00	-.10	.01
16c	-.06	.15	.06	.01	.18	.13	.01	-.09	.06	-.01
17a	.62*	.01	.26	.72*	.14	.40*	.15	.20	-.09	.07
17b	.09	.57*	-.11	.02	.63*	-.02	.22	-.14	.20	-.13
17d	.32*	-.03	.50*	.42*	.12	.60*	.10	.06	-.15	.12
18a	1.00	.17	.28	.58*	.03	.24	.07	.19	-.12	.09
18b		1.00	.03	-.14	.44*	-.16	.13	-.07	.26	-.08
18d			1.00	.34*	-.08	.54*	-.02	.05	-.17	.16
19a				1.00	.20	.57*	.01	.15	-.27	.07
19b					1.00	.21	.12	-.21	.10	-.24
19d						1.00	-.01	-.00	-.21	.03
40							1.00	.16	.20	.15
41a								1.00	.46*	.72*
41b									1.00	.31
41d										1.00

Table 3-1.2. (continued)

Item	45a	45b	45d	46a	46b	46d	47a	47b	47d	48a	48b	48d
14a	.01	-.02	-.06	-.01	-.08	-.04	.00	-.01	-.02	.00	-.06	.00
14b	-.09	.01	-.12	-.03	-.02	-.06	-.08	.03	-.12	-.01	-.04	.03
14c	.01	-.16	-.00	-.04	-.05	.00	-.04	-.08	-.00	-.01	-.07	.01
15a	.05	.15	-.07	.06	-.04	-.10	.05	.08	-.09	.08	-.10	-.06
15b	.01	-.20	-.06	.04	.10	.14	-.02	-.26	-.08	-.06	-.07	.04
15d	-.08	.12	-.01	-.10	.04	-.06	-.06	.14	-.01	.02	.02	.02
16a	-.00	-.08	.05	-.01	-.10	.02	-.03	-.10	-.01	.02	-.05	.02
16b	-.01	.04	-.12	-.01	-.05	-.06	-.02	.03	-.08	-.07	-.10	-.07
16c	.04	-.01	.06	-.02	.01	.10	-.01	-.14	-.03	-.01	-.05	-.03
17a	-.02	.04	-.04	.00	-.14	-.13	.01	.01	-.07	.07	-.10	-.03
17b	-.01	-.15	-.08	.09	.04	.10	.02	-.25	-.14	-.00	-.02	.08
17d	-.02	.08	.00	-.04	.01	-.05	.04	.14	.02	.04	.03	.04
18a	.02	.10	.01	.06	-.08	-.06	.04	-.03	-.02	.16	-.05	-.00
18b	.09	-.17	.05	.11	.11	.23	.03	-.25	-.06	.12	.04	.14
18d	.01	.10	.07	.02	-.00	.06	.02	.14	.10	.13	.09	.12
19a	-.03	.11	-.03	.03	-.14	-.12	.01	.09	-.03	.14	-.04	.02
19b	-.14	-.16	-.09	.05	.02	.10	-.11	-.24	-.17	.04	.04	.17
19d	-.17	.08	-.03	-.07	.02	-.04	-.10	.14	-.03	.10	.10	.07
40	.06	-.10	.03	-.02	-.13	-.03	.02	-.12	-.01	.00	-.06	-.01
41a	.04	.01	.02	.01	-.06	.00	.09	.12	.12	-.04	-.06	.00
41b	-.02	-.30	-.03	-.06	-.12	.06	-.05	-.27	-.00	-.13	-.12	.00
41d	.01	.11	.01	-.04	-.04	.00	.03	.14	.06	-.09	-.05	-.01
45a	1.00	.20	.47*	.32*	.12	.11	.71*	.05	.30	.21	-.02	-.02
45b		1.00	.23	.05	.31	-.01	.18	.50*	.14	.07	.13	.01
45d			1.00	.14	.17	.29	.32*	.14	.42*	.16	.12	.14
46a				1.00	.38*	.42*	.35*	.04	.18	.52*	.28	.26
46b					1.00	.42*	.15	.22	.16	.22	.47*	.34*
46d						1.00	.12	.05	.20	.24	.35*	.49*
47a							1.00	.16	.52*	.25	.05	.10
47b								1.00	.36*	.06	.31	.11
47d									1.00	.13	.13	.14
48a										1.00	.40*	.45*
48b											1.00	.66*
48d												1.00

*$r^2 \geq .10$. Each r^2 is tested against a Type I error rate of $\alpha \leq .000002$ so that the total $\alpha_T \leq .01$.

Table 3-1.3. Factor Pattern Matrix of the Ten Varimax Rotated Factors with Eigen Values Exceeding One for the 34 Items of Table 3-1.1. Only Items with Factor Weights Exceeding .30 are Shown.

	Factor									
Item	1	2	3	4	5	6	7	8	9	10
15a	.66									
17a	.78		.33							
18a	.80									
19a	.78		.37							
15b		.85								
17b		.87								
18b		.72								
19b		.67								
15d			.75							
17d			.77							
18d			.74							
19d			.80							
46a				.60	.38					
46b				.55		.49				
46d				.65						
48a				.67						
48b				.77						
48d				.82						
45a					.86					
45d					.63					
47a					.83					
47d					.61					
45b						.76				
47b						.73				
41a							.88			
41b							.65			
41d							.84			
16a								.83		
16b								.54		.64
16c								.78		
14a									.81	
14b									.43	.67
14c									.77	
40							.34			.32

one another. Item 15a correlates positively with 15d, 17a, 17d, 18a, 19a, and 19d. These items relate to Asian and White friendships developed in junior and senior high school and to the number of close friends and acquaintances had at the time of high school graduation who were members of these two racial groups. As will be noted, social integration of Asians and Whites appears to be accepted more than integration involving Black students. Item 15b correlates with 17b, 18b, and 19b. These items relate to Black and White friendship relations. Finally, item 15d correlates positively with 15a, 18a, 18d, 19a, and 19d.

3. Items 16a, 16b, and 16c intercorrelate positively with one another. These items refer to senior high school student interracial mixing. Item 16b also correlates with 14b and 17a, and again refers mainly to Asian and White racial interactions.

4. Question 40 shows no correlation with any item of the set. This suggests that the liking of Berkeley High School is independent of student's responses to all other items of the set.

5. Items 41a, 41b, and 41d intercorrelate positively with one another. These questions relate to how well a student would like attending a school that has students mainly of one race. The largest correlation in Table 3-1.2 involves how well students would enjoy attending a school that is mainly Asian or mainly White. The correlation coefficient for this association is .72.

6. Questions 45, 46, 47, and 48 intercorrelate with one another in meaningful and expected ways. These questions relate agressive acts such as shakedowns, fights, and arguments to one another. Item 45a correlated with 45d, 46a, and 47a. These are items in which Asians are seen to be the aggressor. Item 45b correlates with items 46d, 48b, and 48d. These items relate aggressive acts in which the protagonists are Black and White.

As can be seen by studying the pattern of loadings of the factors in Table 3-1.3, the 34 items partition into four unique sets of factors in terms of the correlational associations described. The first set contains Factors One, Two, and Three. Factors Four, Five, and Six group together as do Factors Eight, Nine, and Ten. Only Factor Seven seems to stand alone. As the weightings of Table 3-1.3 suggest, items tend to go together in much the same way as they intercorrelate and as previously described.

3-2. Factors One, Two, and Three: Friendships Between and Within Races.

As indicated by the factor pattern of Table 3-1.3, Factor One is heavily weighted by items 15a, 17a, 18a, and 19a, with weighting coefficients of .66, .78, .80, and .78 respectively. Each of these items relates to the making of friends and acquaintances who are Asian. Factor Two is defined mainly by items 15b, 17b, 18b, and 19b with weighting coefficients of .85, .87, .72, and .67. These items involve the making of friends and acquaintances who are Black. Finally, Factor Three is weighted heavily on items 15d, 17d, 18d, and 19d with weighting coefficients of .75, .77, .74, and .80. These items relate to the making of friends and acquaintances who are White. Since the remaining weighting coefficients are all less than .38 with an average absolute value of .12, they can be dismissed as defining the factors of this set of variables. In any case, it can be stated that Factors One, Two, and Three measure the degree to which the students in the integrated setting made casual and longterm friendships with students who are Asian, Black, and White. On the surface one would expect such friendships to develop if integration leads to understanding and acceptance of individuals with different cultural and racial backgrounds. As will be seen, this probably did not happen to any large degree though the data show that cross-racial friendships did develop. It might be said that if a student makes even one or two close friendships with a student of another race who he normally would not have met in a segregated setting, then social mixing on a mutually acceptable basis has occurred. Since this is what actually happened, it appears that one of the many secondary goals of integration has been attained.

3-3. Factors Four, Five, and Six: Agressive Actions Between and Within Races.

Whereas Factors One, Two, and Three relate to social acceptance of peers of different races, Factors Four, Five, and Six relate to the degree of violence that exists between the students in terms of quarrels, shakedowns, and other aggressive activities.

Factor Four is weighted heavily on items 46a, 46b, 46d, 48a, 48b, and 48d. The corresponding weighting coefficients are given by .60, .55, .65, .67, .77, and .82. The remaining coefficients are less than .14 in absolute value. Items 46 and 48 measure the degree to which students express aggression toward each other in terms of how often they were involved in a fight, quarrel, or argument with a student of their own or another race. Fa ctor Five is weighted by items 45a, 45d, 47a, and 47d with weights of .86, .63, .83, and .61. These items relate to the number of shakedowns or rip-offs perpetrated by Asian and White students. Factor Six is also a ripping-off factor but in which the aggressor is a Black student. It is defined by items 45b, and 47b with weighting coefficients of .76 and .73. Without doubt these factors relate to the animosities that exist between the students of different races in the integrated school environment. One goal of integration would be the elimination of such aggressive interpersonal relationships. As will be seen, there is a definite evidence that aggressive acts did occur in the integrated setting but that they decreased in frequency over the years.

3-4. Factor Seven: Attending School with Students of Mainly One Race.

Factor Seven is weighted for the most part by items 41a, 41b, and 41d. The weighting coefficients are given by .88, .65, and .34, respectively. These questions measure the degree to which students would have liked attending school which consisted mainly of students of a single race. As will be seen, this idea was looked upon with favor by these students.

3-5. Factors Eight, Nine, and Ten: Perception of Interracial Social Mixing.

While these three factors hold together in a meaningful way, they tend to overlap and are not so clearly defined as the previously discussed factors. Factor Eight is defined for the most part by items 16a, 16b, and 16d with coefficients of .83, .54, and .78. Item 16 refers to how often students perceived classmates of different races in the art of talking and mixing with one another during the senior high school years. Factor Nine is the corresponding item for the junior high school years. It is defined by items 14a, 14b, and 14d with coefficients of .81, .43, and .77. Factor Ten appears to be a subfactor of these two factors. It is most weighted by items 14b and 16b which refer to the mixing of Asians and Whites only. As will be seen, a considerable amount of mixing of Asians and Whites was reported by students in this integrated setting.

3-6. Summary Statement on the Four General Factors of Form A.

As a result of the principal component analysis and varimax rotation on the correlation matrix, all 34 items but one were combined in a meaningful fashion into ten different interpretable factors. Item 40 on how well the students liked attending Berkeley High School did not appear in any of the ten factors. Factors One, Two, and Three relate to the making of new friends and acquaintances in the integrated setting. These factors measure one of the goals of any school integration plan in which one objective is to get people of different races together on mutual interests and goals in life and the acceptance of one another on dimensions other than skin color. Factors Four, Five, and Six relate to an undesireable effect of school integration frequently mentioned by parents as one of the reasons that they are against school integration. These undesireable elements concern the amount of interracial fighting and quarrelling that goes on between students of different races. Factor Seven relates to the previous six factors in that it might be hypothesized that students who make many friends among students of different races would approve of education in the integrated setting whereas students involved with aggressive shakedowns, quarrels, and other friction-producing activities would prefer education in a racially segregated school. In a certain sense, Factors Eight, Nine, and Ten relate to the other factors of the set since the perceptions of other students' activities can be clouded by ones own behavior. Students mixing with many friends among the various races might well see others doing the same whereas students with no friends outside of their own race might well perceive that social mixing and talking in an informal situation has not occurred mainly because it has not occurred for themselves.

Since these factors appear to be well defined by the large factor loadings, it makes sense to give them working names. As already indicated, Factors One, Two, and Three will be referred to as a Friendship Factor. Factors Four, Five, and Six will be called an Aggressive Act Factor. Factor Seven will be called Attendance at a Mainly One Race School. Finally, Factors Eight, Nine, and Ten will be termed Perceptions of Interracial Social Mixing.

3-7. Multivariate Analysis of Variance of the Four Factor Items.

Analysis of survey data is at best an art. What one does to extract the information contained in masses of survey data is determined by the individual researcher mainly to satisfy his own interest, his capabilities, and the facilities and finances that are available to him to complete his task and its goals and objectives. While it makes good sense to determine the factor scores for each of the ten generated factors and then use them in a ten variable multivariate analysis of variance, it was decided to do four separate multivariate analyses of variance on the four sets of variables defined by the principal component analysis described in the previous sections. These analyses were performed across three relevant demographic variables: Sex, race, and socio-economic status as defined in an earlier study by Marascuilo.(4)

The operational definition of SES used is based upon a division of the 28 census tracts of Berkeley into three groups consisting of low, medium, and high SES neighborhoods. The division is based upon 1960 Census data and voting records of 1960-1964 Berkeley elections. For the most part, the Black students of the community reside in the low SES tracts while the White students reside in the high SES tracts. Because of this imbalance in residency, it was necessary to combine SES groups for some of the analyses discussed in the following sections. In every case where collapsing across SES had to be performed, little difficulty exists in interpretation of the results as all combining is clearly indicated in the corresponding analysis of variance table.

Significant sources of variance were given a Scheffé type post hoc analysis based on Roy's criterion and described by Morrison.(7) To save space and spare the reader an excessive reading of tables of numbers, estimates of contrasts, confidence intervals, and all significant contrasts are discussed without presentation of their actual values and numerical ranges. Since the denominator degrees of freedom of most of the F-tests are so large, almost all mean differences are significant if the F ratio is large.

3-8. Analysis of Friendships Between and Within Races.

The method of scoring used on the items of this analysis should be understood before the remaining discussion can be read with understanding. The response choices for questions 15, 17, and 19 are given by:

VERY MANY	MANY	SOME	FEW	NONE

To help the students in their choice selection, these categories were further refined to read as follows:

(11 or more)	(6-10)	(3-5)	(1-2)	(0)

Because of this specific quantification of the scale, the distance between the response choices are not equal intervals. However, for the analysis the following equal interval scoring was used:

4	3	2	1	0

As a result, average scores actually refer to a category and not to the average value of a variable. For this reason, the five point scale has been divided into five continuous equal width intervals. These intervals are given by:

4-3.2	3.2-2.4	2.4-1.6	1.6-.8	.8-0

Thus, an average value of 2.7 signifies that the mean response choice is MANY and that the average number of new friends or acquaintances is given by 6 to 10 students. In a like manner, an average value of 1.3 refers to the response choice of FEW with 1 to 2 new friends. In general, this coding should cause little confusion, and since the sample sizes are relatively large, it will not invalidate the use of the multivariate F test. A justification for this scaling procedure is given by Cochran and Snedecor.(1)

The response choices for question 18 are given by:

NONE	ONE	TWO	THREE OR MORE

and have been scored for analysis by:

0	1	2	3

When this range is split into four equal width intervals, the range values are given by:

0-.75	.75-1.50	1.50-2.25	2.25-3

Average values are interpreted in line with these range values.

The analysis of variance table for items 15, 17, 18, and 19 is presented in Table 3-8.1.

In the remainder of this section, each source of variance listed in Table 3-8.1 is examined in the order presented. Whenever a significant F ratio is reported, an in depth analysis of the mean differences and profiles is presented. Whenever an F ratio is reported as not significant, no further analysis is reported or even called for, since the mean values are equal or nearly equal across the groups being compared.

Since there are so few Asian students in each of the three SES regions, they were eliminated from the sex by race comparisons. In addition, a number of groups had to be combined because of the small sample sizes.

3-9. Differences Between the Three Races on the Friendship Factor of Form A.

Since $F_{24,\infty}(.99) = 1.79$, the differences between the profiles for the three races are seen to be statistically significant. The mean scores and profiles for the three racial groups are shown in Table 3-9.1. As will be seen, the interpretation of the multivariate F-statistic is not altogether clear. The subjective meaning of many, some, or few close friends, friends, or acquaintances raises a problem of interpretation. If a student has four close friends, does this mean he has many, some, or few close friends? On the surface, a clear cut answer to the question is unavailable, so an operational answer is required. It is perhaps true that most people have about one to, say, six close friends that exist outside of their nuclear and extended family. They probably have one to, say, fifteen friends who they see at least once a month. Their acquaintances may number from ten to a hundred or more, depending upon individual peculiarities. Thus, if a person has one or two close friends of another race, it would be reasonable to conclude that he has more than the typical person one might meet on the street. This would also be true if the number of other friends exceeded one or two and it might even be true if the number of persons called acquaintances numbers one or two. For these reasons, the making of three or more close friends of a different race will be taken to represent a strong interracial acceptance and the making of SOME (3-5) friends and MANY (11 or more) acquaintances will also be interpreted the same way.

As can be seen, Asians report large numbers of new friendships with other Asians during their integrated junior and senior high school years. Their most typical responses are MANY (6-10) and VERY MANY (11 or more). On the average, new friendships with Blacks are relatively large. In general, they have made SOME (3-5) new Black friends in junior high school and MANY (6-10) in senior high school among their Black classmates. They have one close Black friend and MANY (6-10) acquaintances among Black classmates. Even though Asians are thought

Table 3-8.1. Mean Responses According to Race on Factors One, Two, and Three of Form A: Friendships Between andWithin the Three Races.*

Source of Variance	d/f_1	d/f_2	F	Decision
Race	24	642	25.6	Significant
SES	24	644	6.5	Significant
Sex	12	324	1.1	N. S.
SES 1 vs SES 2 vs SES 3 in Asians	24	134	1.4	N. S.
SES 1 vs SES 2 & 3 in Black Males	12	70	1.0	N. S.
SES 1 & 2 vs SES 3 in White Males	12	64	1.8	N. S.
SES 1 vs SES 2 & 3 in Black Females	12	36	.5	N. S.
SES 1 & 2 vs SES 3 in White Females	12	80	.7	N. S.

$F_{24,\infty}(.99) = 1.79$, $F_{12,60}(.99) = 2.50$

*Nested comparisons for Asians by sex are not reported since sample sizes were too small for the multivariate F test.

Table 3-9.1. Mean Response According to Race on Factors One, Two, and Three of Form A: Friendships Between and Within the Three Races.

	Mean on Code Scale			Mean Response Choice*				
	Asians	Blacks	Whites	Asians	Blacks	Whites	F-ratio	Decision
New Friends in Junior High School Who Are:								
15a Asian	3.0	1.5	2.3	Many	Few	Some	50.1	Significant
15b Black	2.3	3.6	2.6	Some	Very Many	Many	67.8	Significant
15d White	3.1	2.2	3.4	Many	Some	Very Many	38.3	Significant
New Friends in Senior High School Who Are:								
17a Asian	3.3	1.8	2.6	Very Many	Some	Many	36.7	Significant
17b Black	2.7	3.6	2.6	Many	Very Many	Many	26.2	Significant
17d White	3.2	2.4	3.4	Many	Some	Very Many	29.4	Significant
Close Friends Who Are:								
18a Asian	2.5	.9	1.5	Three or More	One	One	37.4	Significant
18b Black	1.3	2.7	1.4	One	Three or More	One	42.6	Significant
18d White	2.2	1.4	2.8	Two	One	Three or More	55.5	Significant
Acquaintances Who Are:								
19a Asian	3.6	1.7	3.0	Very Many	Some	Many	71.7	Significant
19b Black	2.8	3.7	3.0	Many	Very Many	Many	14.7	Significant
19d White	3.4	2.4	3.8	Very Many	Some	Very Many	59.1	Significant
Sample Size	81	84	170					

$F_{2,\infty}(.99) = 4.61$

*Very Many = 11 or more, Many = 6-10, Some = 3-5, Few = 1-2, None = 0 of as being relatively aloof from Blacks in the integrated setting, these students have met a fair number of Blacks on a warm or close friendship basis. When it is recalled that approximately 45 percent of the student body is Black and that many opportunities exist for social encounters, it is not surprising that friendships did develop in such great numbers. Even though Whites also comprise 45 percent of the student body Asians made more new friends among White students than they did among Blacks. Generally, they report the making of MANY (6-10) new White friends in junior high school and MANY (6-10) in senior high school. They have about 2 close White friends and VERY MANY (11 or more) acquaintances among White classmates. These findings suggest that in an integrated school setting Asians integrate with other students to a large degree. Since they have made MANY friends across the races, it would have to be concluded that they have, indeed, integrated.

What is true of the Asian student in the integrated school is not as true of the Black student, since they appear to integrate to a lesser degree. In both junior and senior high school they report that they made VERY MANY (11 or more) friends and acquaintances who are also Black. They have three or more close Black friends and VERY MANY (11 or more) Black acquaintances. Concerning cross-racial friendships with Asians and Whites they report that they made a FEW (1-2) Asian and SOME (3-5) White new friends in their junior high school years and SOME (3-5) Asian and SOME (3-5) White new friends in their senior high school years. They have SOME (3-5) Asian and SOME (3-5) White acquaintances and one close Asian friend and one close White friend. Thus, it appears that school integration does not necessarily promote as many close interracial friendships on the part of the Black students as it does for Asians and for Whites. In any case, if a Black reports that he has one Asian or White close friend in his immediate social circle, then it would have to be concluded that he has indeed accepted limited friendships across race. As stated earlier, interpretation of these findings will remain cloudy until the size of a friendship circle can be agreed upon.

The findings reported for Asians are similar to the findings for White students in the integrated school. During their junior high school years they made VERY MANY (11 or more) new friends who are White like themselves. During their senior high school years they continued to make VERY MANY (11 or more) new White friends. At the same time they report that they made VERY MANY (11 or more) acquaintances during their entire school years that are White. In their junior high school years they made SOME (3-5) Asian friends and during their senior high school years they made MANY (6-10) Asian friends. At the same time, they report having made MANY (6-10) friendships and acquaintances with Asians and have one close Asian friend. When it comes to making friends with Black students, they report that during their junior and senior high school years they made friends with MANY (6-10) Blacks. They also report making MANY (6-10) Black acquaintances during their entire school career and have about one close Black friend. Thus, even for Whites, school integration does not entail large numbers of close interracial friendships. In any case, it must be concluded that friendships did develop across the differences in skin color.

As suggested by the responses given by students who have spent six years in an integrated school, it would appear that school integration does not foster the making of many close interracial friendships. Students in these schools tended to make many new friends and acquaintances among students whose race was identical to their own. Where friendships developed across races, they were seen to be few in number as reported by the respondents to the questionnaires. Since a person can only have a few close friends, this is not surprising. In addition, that close cross-racial friendships did not develop in great numbers within the integrated school is not too surprising when the nature of the Berkeley student body is examined. For the most part, the White students come from the high SES hill portions of the school district. Their parents tend to be white collar workers and highly professional or managerial. Their life style corresponds to the kind found in the homes of professors, lawyers, doctors, executives, and other similarly trained workers. The Blacks, on the other hand, live in the low SES flatland census tracts of the city. For the most part, their fathers tend to be blue collar workers, though Black professionals and white collar workers are also found in their midst. Finally, the Asians are fairly well-distributed throughout the community, but for the most part represent upper lower to lower upper social class life styles and aspirations. They have always placed a high value on education and their children respond to this value in many subtle ways. This may tend to reduce their interacting and developing many close friendships across race. The three groups have very different life styles and aspirations; they differ widely in what the individual members expect of education. While they may attend the same schools, the differences between them are still large enough to keep them separate.

Finally, it should be noted that when two White students report that they have one close Black friend, it could be that each is reporting about the same individual. The way the questions were asked one cannot determine whether many or just a few students were accepted across races. Since friendships are based upon common needs, interests, goals, and desires it could be that social integration of a friendship nature involves only a small group of students. While the data does not support this argument, it is true nonetheless that it might if different questions were asked or if a social distance inquiry were to have been made. In any case, the interpretations, while plausible, deserve further study. As one student reported, the making of friendships between and within races "depends on who they are."

3-10. Linear Discriminant Analysis on the Friendship Questions Between the Three Racial Groups.

Two statistically significant discriminant functions were generated across the three racial groups from the original data matrix for Questions 15, 17, 18, and 19. These functions are reported in Table 3-10.1 along with the mean values for the three racial groups. Unfortunately, these functions are difficult to interpret and, as a result, are not too informative. Examination of the mean values of the functions on a scale with a mean of 50 and a standard deviation of 10 suggests that Function One discriminates Blacks from Asians and Whites as a group. This function is heavily loaded on Item 15b which asks about the number of friends made in junior high school that were Black. This one item seems to be pitted against items 15a and 19a which relate to the number of Asian friends made during the junior high school years and the number of acquaintances that one has who are Asian. As was already shown, Asians and Blacks did not develop many interracial friendships and acquaintances while Whites did report a fair amount of mixing with the Asian students. It is quite clear that Function Two discriminates the Asians, Blacks, and Whites from one another. This function is positively weighted by items 15a and 18a and negatively weighted by 15d and 18d. This function most likely represents the unequal response sets given by Asians and Whites to friendships and acquaintances in these two racial groups. Asians report two close White friends while Whites report three or more close White friends. Also, Asians reported that they made MANY (6-10) new White friends in junior high school while Whites reported making SOME (3-5) Asian friends in junior high school. This suggests that Whites have a much broader definition of acquaintances and close friends than does the Asian student, or else it simply reflects the fact that Asians account for less than 10 percent of the student body. What implication this has for integration and understanding of others is not clear, but it would appear that the Asian students would be less likely to mix with the Black students than would the White students. As already noted, this is what was reported to have occurred in the school setting.

3-11. Differences Between the Three SES Groups on the Friendship Factor of Form A.

As indicated in Table 3-8.1, the differences between the three SES groups is significant at $\alpha \leq .01$. The mean profiles for the three SES groups on the items defining Factors One, Two, and Three are shown in Table 3-11.1. Students from the low SES tracts, which are populated mainly by Blacks, report that on the average they made SOME (3-5) Asian, MANY (6-10) Black, and MANY (6-10) White friends during their junior and senior high school years. The students in the medium SES areas report having made MANY (6-10) Asian, MANY (6-10) Black, and MANY (6-10) White friends during their junior and senior high school years. Students in the high SES areas made SOME (3-5) Asian, SOME (3-5) Black, and VERY MANY (11 or more) White friends in junior high school. During their senior high school years

Table 3-10.1. The Significant Linear Discriminant Functions Between the Three Races on the Friendship Questions of Form A.

	Function One	Function Two
New Friends in Junior High School Who Are:		
15a Asian	-.35	.35
15b Black	.59	.17
15d White	-.17	-.50
New Friends in Senior High School Who Are:		
17a Asian	.08	.22
17b Black	.06	.03
17d White	.09	-.05
Close Friends Who Are:		
18a Asian	-.08	.46
18b Black	.28	-.10
18d White	-.26	-.45
Acquaintances Who Are:		
19a Asian	-.35	.07
19b Black	.13	-.28
19d White	-.11	-.07
Mean Value	50	50
Asian	44.0	63.9
Black	65.9	48.4
White	44.8	39.8
Relative Deviate Value		
Asian	-.60	1.39
Black	1.59	-.16
White	-.52	-1.02
Value of Chi-square	438.8	105.8

$X^2_{24,\infty}(.99) = 42.98$

Table 3-11-1. Mean Responses According to SES on Factors One, Two, and Three of Form A: Friendships Between and Within the Three SES Groups.

	SES Level			Mean Response Choice*			Univariate F-ratio	Decision
	Low	Medium	High	Low	Medium	High		
New Friends in Junior High School Who Are:								
15a Asian	2.0	2.5	2.4	Some	Many	Some	3.9	N. S.
15b Black	3.1	2.6	2.0	Many	Many	Some	30.0	Significant
15d White	2.5	2.9	3.4	Many	Many	Very Many	21.2	Significant
New Friends in Senior High School Who Are:								
17a Asian	2.3	2.6	2.7	Some	Many	Many	4.2	N. S.
17b Black	3.2	2.9	2.6	Many	Many	Many	9.9	Significant
17d White	2.7	3.0	3.5	Many	Many	Very Many	14.4	Significant
Close Friends Who Are:								
18a Asian	1.4	1.7	1.6	One	Two	Two	1.0	N. S.
18b Black	2.3	1.7	1.3	Three or More	Two	One	23.0	Significant
18d White	1.8	2.3	2.7	Two	Three or More	Three or More	23.9	Significant
Acquaintances Who Are:								
19a Asian	2.3	3.0	3.1	Some	Many	Many	11.7	Significant
19b Black	3.3	3.2	3.0	Very Many	Many	Many	3.3	N. S.
19d White	2.8	3.3	3.8	Many	Very Many	Very Many	26.2	Significant
Sample Size	96	92	148					

$F_{2,\infty}(.99) = 4.61$

*Very Many = 11 or more, Many = 6-10, Some = 3-5, Few = 1-2, None = 0 these same students continue to report that they made MANY (6-10) Asian, MANY (6-10) Black, and VERY MANY (11 or more) White friends. Thus, it can be concluded that students in an integrated setting make interracial friendships across SES levels but that the greater part of their patterns are developed and maintained within their own social and economic class. There are many factors that influence the entire framework of friendship development. For high school students in an integrated school, skin color may not play the dominant role in friendship determination; rather, social class and economic status may be the significant determiner of frienship patterns as in the classical studies. No data is available from this survey on this supposition, but it certainly is worthy of further consideration.

When consideration is given to the number of close friends students made from the various races, students in low SES tracts report that they average one Asian, three or more Black, and two Whites, while students in the medium SES tracts average two ASian, two Black, and three or more White, and students of the high SES tracts average two Asian, one Black, and three or more White close friends. Thus, as social class increases, number of Black friends decreases while the number of Asian and White friends increases. Further, these statistics indicate that students show a strong tendency to choose their close friends within their own SES group. While it cannot be stated with any high degree of confidence, it is quite possible that the Black students made as friends by the high SES Whites are also from the high SES areas. These may be the same high SES students who claim to have a Black as a close friend. At the same time, it appears that Blacks and Whites in the low SES areas develop close friendships even though it is frequently reported that low SES White and Black adults do not get along on the job or in an interracial neighborhoods.

While no statistical comparisons were made within SES, it is worth noting that among the low SES Blacks, the mean responses to items 15d, 17d, 18d, and 19d are given respectively by 2.1 (SOME), 2.4 (SOME), 1.4 (FEW), and 2.4 (SOME). In other words, the low SES Black does not mix with Whites in general, be they low, medium, or high SES. Among the low SES Whites, mean responses to items 15b, 17b, 18b, and 19b are given respectively by 2.3 (SOME), 2.8 (MANY), 1.8 (SOME), and 3.0 (MANY). These statistics suggest that the low SES White tends to mix with Blacks more than Black do with Whites. This is clearly an area which needs further study.

Low SES students report that they have SOME (3-5) Asians, VERY MANY (11 or more) Blacks, and MANY (6-10) Whites who are considered as acquaintances at the end of the six year integration period. This again reflects the fact that low SES students tend to be mainly Black in Berkeley. On the other hand, medium and high SES students report that they have MANY (6-10) Asian, MANY (6-10) Black, and VERY MANY (11 or more) White acquaintances. This, too, reflects the White residency patterns in these two SES regions.

In summary, it can be concluded that school integration does promote some social interaction across SES groups, but that the major part of social interracial relationships occur within a student's own social and economic class. It may be that patterns of friendship and acquaintance are set in the earlier grades, or it may be that patterns of friendship are associated with travel to and from school and after-school play patterns. In either case, the patterns of friendship which reflect social class are probably also a function of segregated housing which, in Berkeley, reflects income.

3-12. Linear Discriminant Analysis on the Friendship Questions Between the Three SES Groups.

One statistically significant discriminant function was generated across the three SES groups on questions 15, 17, 18, and 19. The coefficients for this function are reported in Table 3-12.1. This function is positively weighted on items 15b and 18b and negatively weighted on items 15d and 18d. This suggests that this function provides a discriminator on a Black-White comparison. Question 15 refers to the making of friends in junior high school while question 18 refers to the number of close friends that a person has at graduation from the three different races. Low SES students made MANY Black friends and MANY White friends in junior high school. They also have three or more close Black friends and about two close White friends at graduation. On the other hand, high SES students made SOME Black friends and VERY MANY White friends in junior high school. Also, they have about one close Black friend and three or more close White friends at graduation. This SES-racial difference is reflected in the mean values of the discriminant function transformed to a scale with a mean of 50 and a standard deviation of 10. The low SES groups average 1.39 standard deviations above the mean, while the high SES group averages 1.13 standard deviations below the mean of the discriminant score distribution. This amounts to 2.52 standard deviations difference between the two groups of students. On any scale, this represents an exceedingly large mean difference.

3-13. Differences Between the Sexes on the Friendship Factor of Form A.

The value of the F ratio for the multivariate analysis of mean differences between the male and female students is given by F = 1.06. With the tabled value $F_{12,\infty}(.99) = 1.79$, it must be concluded that the differences between the mean profiles for the two sexes are not statistically significant. For completeness, the mean profiles are reported in Table 3-13.1. As indicated by these statistics both males and females report that they made SOME (3-5) friends who are Asian, SOME (3-5) friends who are Black, and MANY (6-10) friends who are white during their junior high school years. During their senior high school years the typical response is MANY (6-10) new friends. Concerning the number of close friends at graduation, both males and females report that they tend to have two Asians, two Blacks, and three

Table 3-12.1. The Significant Linear Discriminant Function Between the Three SES Groups on the Friendship Factor of Form A.

	Coefficient
New Friends in Junior High School Who Are:	
15a Asian	.04
15b Black	.45
15d White	-.43
New Friends in Senior High School Who Are:	
17a Asian	-.06
17b Black	-.00
17d White	.02
Close Friends Who Are:	
18a Asian	.05
18b Black	.40
18d White	-.38
Acquaintances Who Are:	
19a Asian	.04
19b Black	-.16
19d White	-.08
Average Value	50
Low SES	61.4
Medium SES	52.4
High SES	38.7
Relative Deviate Value	
Low SES	1.39
Medijm SES	.24
High SES	-1.13
Value of Chi-square	141.8

$\chi^2_{24,\infty}(.99) = 42.98$

Table 3-13.1. Mean Responses According to Sex on Factors One, Two, and Three of Form A: Friendships Between and Within the Male and FEmale Students.

	Mean on Code Scale		Mean Response Choice*		Univariate F-ratio
	Males	Females	Males	Females	
New Friends in Junior High Who Are:					
15a Asian	2.4	2.2	Some	Some	3.1
15b Black	2.5	2.5	Some	Some	.1
15d White	3.2	2.9	Many	Many	3.3
New Friends in Senior High Who Are:					
17a Asian	2.6	2.5	Many	Many	1.6
17b Black	2.8	2.9	Many	Many	1.0
17d White	3.2	3.0	Many	Many	2.6
Close Friends Who Are:					
18a Asian	1.6	1.6	Two	Two	.1
18b Black	1.7	1.7	Two	Two	.0
18d White	2.4	2.2	Three or More	Two	1.9
Acquaintances Who Are:					
19a Asian	2.9	2.8	Many	Many	1.7
19b Black	3.1	3.2	Many	Many	1.4
19d White	3.4	3.3	Very Many	Very Many	.5
Sample Size	152	185			

$F_{1,\infty}(.99) = 6.63$

*Very Many = 11 or more, Many = 6-10, Some = 3-5, Few = 1-2, None = 0.

or more Whites who are considered close friends. Finally, they report that they tend to have MANY (6-10) Asian, MANY (6-10) Black, and VERY MANY (11 or more) White acquaintances. Since the differences between the races has been seen to be large, not much attention should be given to these findings which ignore race as a variable even though development of friendships across and within races might well be independent of sex.

3-14. Nested Comparisons Between the Three SES Groups Within the Sex by Race Groups on Factors One, Two, and Three of Form A: Friendships Between and Within the Three SES Groups.

Since none of the F-ratios for the nested comparisons of SES in Sex by Race groupings indicate the existence of any significant differences, the findings related to the sex differences and race differences can be extended across the three different SES groups. As stated, Asians were combined across sex for these analyses because of their small numbers.

3-15. Questions of the 1966 Questionnaire that Relate to Factors One, Two, and Three of Form A.

At the 1966 testing, students were asked the questions listed in Table 3-15.1. For analytical purposes the response choices were coded as:

MANY	SOME	NOT VERY MANY	NONE
3	2	1	0

and for interpretive purposes are related to the equal width intervals:

3-2.25	2.25-1.50	1.50-.75	.75-0

Questions asking about friendship last year refer to the first year of the integration program when these students were in the seventh grade. The remaining three questions refer to the friendships made during their eighth grade or second year's experience in an integrated setting. For these analyses, simple F-ratios are not presented since they were never determined across the two different junior high schools of the community.

Responses across race, but only for Blacks and Whites, are reported in Table 3-15.2. These were significant across the races on these items in the two junior high schools. As indicated, mean responses for Blacks and Whites making new friends last year are 2.7 (MANY) and 2.5 (MANY). During the second year Blacks added 1.8 (SOME) new friends, while Whites continued to add 2.7 (MANY) new friends to their friendship group. Whites reported that they made 1.9 (SOME) new Black friends in the first year of the integration program and 2.0 (SOME) new Black friends during the second year. The same mean responses were given by Blacks to Questions 16 and 30 concerning the making of new White friends. These statistics agree quite favorably to the mean

Table 3-15.1. Questions of the 1966 Questionnaire That Correspond to Questions that Define Factors One, Two, and Three of Form A.

15 Did you make many new friends in your classes last year?

MANY SOME NOT VERY MANY NONE

16. Did you make any new White friends last year?

MANY SOME NOT VERY MANY NONE

17. Did you make any new Negro friends last year?

MANY SOME NOT VERY MANY NONE

29. How many new friends have you made in your classes this year?

MANY SOME NOT VERY MANY NONE

30. Did you make any new White friends this year?

MANY SOME NOT VERY MANY NONE

31. Did you make any new Negro friends this year?

MANY SOME NOT VERY MANY NONE

Table 3-15.2. Mean Responses According to Race on the Questions of the 1966 Questionnaire That Correspond to Questions that Define Factors ONe, Two, and Three of Form A.

		Mean on Code Scale		Mean Response Choice*	
		Black	White	Black	White
15.	New Friends Last Year	2.7	2.5	MANY	MANY
16.	New White Friends Last Year	2.0	2.5	SOME	MANY
17.	New Black Friends Last Year	2.7	1.9	MANY	SOME
29.	New Friends This Year	1.8	2.7	SOME	MANY
30.	New White Friends This Year	2.0	2.4	SOME	MANY
31.	New Black Friends This Year	2.6	2.0	MANY	SOME

responses reported in Table 3-9.1, taking into account the difference in response choices. To items 15b and 15d Blacks report that they made SOME White friends while Whites reported that they made SOME Black friends. Thus, the two sets of data taken five years apart agree on these particular questions.

Mean responses across the two sexes are reported in Table 3-15.3. Differences on these items are not significant across sex in the two schools. Concerning the making of new friends during the first and second years of the integration program, the mean response for boys to questions 15 and 29 was 2.5 (MANY) and 1.8 (SOME). For the girls the corresponding responses were 2.6 (MANY) and 1.7 (SOME). Thus, during the first year of the integration program, students reported that they made MANY new friends and then continued to add SOME new friends to their circle of friends. Both boys and girls report that they made MANY new Black and White friends during the first two years of the integration. Even though the set of response choices for the two sets of questions are different, in essence the responses to these questions are very similar to the responses to items 19b and 19d as reported in Table 3-13.1. In addition, mean responses to questions 16, 17, 30, and 31 are in agreement with mean responses to items 15b and 15d, as reported in Table 3-13.1.

3-16. Summary for the Friendship Factor.

Differences between the three races on the friendship items are significant, F = 25.6. Asians reported large numbers of friendships with other Asians during their integrated junior and senior high school years. On the average, new friendships with blacks were substantial but not excessively large in number. In general, they made some new Black friends in junior high school and many new Black friends in senior high school. They made one close Black friend and many acquaintances among Black classmates. Asians made more new friends among White students than they did among Black students. Generally, they reported making many new White friends in both junior and senior high school. They made about two close White friends and very many acquaintances among White classmates. Since Asians made many friends across races, it would have to be concluded that Asians have integrated.

Black students did not integrate to the same degree as Asians. In both junior and senior high school they report that they made very many friends and acquaintances who are also Black. They made three or more close Black friends and very many Black acquaintances. Concerning cross-racial friendships with Asians and Whites, Blacks report that they made a few Asian and some White new friends in junior high school. In senior high school they made some Asian and some White friends. They made some Asian and some White acquaintances and one close Asian and one close White friend. Thus, for Blacks, school integration does not necessarily promote as many close interracial friendships on the part of Black students though their numbers are not minimal.

Friendship patterns for Whites are quite similar to those

Table 3-15.3. Mean Responses According to Sex on the Questions of the 1966 Questionnaire That Correspond to Questions that Define Factors One, Two, and Three of Form A.

	Mean on Code Scale		Mean Response Choice	
	Males	Females	Males	Females
15. New Friends Last Year	2.5	2.6	MANY	MANY
16. New White Friends Last Year	2.3	2.4	MANY	MANY
17 New Black Friends Last Year	2.3	2.4	MANY	MANY
29. New Friends This Year	1.8	1.7	SOME	SOME
30. New White Friends This Year	2.1	2.2	SOME	SOME
31. New Black Friends This Year	2.2	2.4	SOME	MANY

reported by Asians. During the junior high school years Whites made very many new friends who are White like themselves. During their senior high school years they continued to make very many new White friends. At the same time they reported making very many White acquaintances during their entire school years. In their junior high school years they made some Asian friends and during their senior high school years they made many Asian friends. They reported having made many friendships and acquaintances with Asians and made one close Asian friend. When it comes to making friends with Black students, Whites report that during their junior and senior high school years they made friends with many Blacks. They also report making many Black acquaintances during their entire school career and have about one close Black friend. Thus, even for Whites, school integration does not entail large numbers of close interracial friendships. In any case, it must be concluded that friendships did develop across the differences in skin color.

As suggested by the responses given by students who have spent six years in an integrated school, it would appear that school integration does not foster the making of many close interracial friendships. Students tended to make many new friends and acquaintances among students whose race was identical to their own. Where friendships developed across races, they were seen to be few in number, as reported by the respondents to the questionnaires. Since a person can only have a few close friends, this is not surprising. In addition, that close cross-racial friendships did not develop in great numbers within the integrated school is not too surprising when the nature of the Berkeley student body is examined. For the most part, the White students come from the high SES hill portions of the school district. Their parents tend to be white collar workers and highly professional or managerial. Their life style corresponds to the kind found in the homes of professors, lawyers, doctors, executives, and other similarly trained workers. The Blacks, on the other hand, live in the low SES flatland census tracts of the city. For the most part, their fathers tend to be blue collar workers, though Black professionals and white collar workers are also found in their midst. Finally, the Asians are fairly well-distributed throughout the community, but for the most part represent upper lower to lower upper social class life styles and aspirations. They have always placed a high value on education and their children respond to this value in many subtle ways. This may tend to reduce their interacting and developing many close friendships across race. The three groups have very different life styles and aspirations; they differ widely in what the individual members expect of education. While they may attend the same schools, the differences between them are still large enough to keep them separate.

Finally, it should be noted that when two White students report that they have one close Black friend, it could be that each is reporting about the same individual. The way the questions were asked one cannot determine whether many or just a few students were accepted across races. Since friendships are based upon common needs, interests, goals, and desires it could be that social integration of a friendship nature involves only a small group of students. While the data does not support this argument, it is true nonetheless that it might if different questions were asked or if a social distance inquiry were to have been made. In any case, the interpretations, while plausible, deserve some further study. As one student reported, the making of friendships between and within races "depends on who they are."

Similar analyses were performed across social classes. Since social class is highly correlated with race in the community, findings for race can be extended directly to social class as defined by the 1960 census data for Berkeley. Since the definition for low, medium, and high SES as used in this report, are peculiar to Berkeley, no further comments are provided.

When comparisons are made across sex, no statistically significant findings were noted. Finally, the comparisons between 1966 and 1970 responses to similar questions were essentially the same.

3-17. Analysis of Agressive Acts Between and Within Races.

The response choices for Questions 45, 46, 47, and 48 are given by:

VERY OFTEN	OFTEN	RARELY	NEVER

To assist the graduating seniors in their decision making, these choices were further refined to read:

6 or more	3-5	1-2	0

and for analytical purposes have been scored as:

3	2	1	0

Because of the indicated quantification of the original set of response choices, the distances along the scored scale are not equal intervals. As a result, mean values on the scored scale must be referred back to the original scale for interpretation. To aid this interpretation the four point scale has been divided into four continuous equal width intervals. These intervals are given by:

3-2.25	2.25-1.50	1.50-.75	.75-0

Corresponding to the analysis of questions 15, 17, 18, and 19, each source of variance listed in Table 3-17.1 is examined in the order presented. Post hoc comparisons are discussed only for the statistically significant differences, whereas non-significant differences are examined briefly or not at all. Where necessary, groups have been combined so as to generate valid F-ratios. The complete set of F-ratios is reported in Table 13-17.1.

3-18. Differences Between the Three Races on the Agressive Acts Factor of Form A.

Differences between the races are statistically significant. The mean profiles are reported in Table 3-18.1. As indicated by the responses to question 45, shakedowns and ripping-offs did not occur too often, but are definite experiences in the school as reported by Asians and Whites in their junior high school years. The typical response is RARELY (1-2). If this average response is projected across the junior high school years, then it should be concluded that interracial threats, and aggressive acts occur to at least one Asian or White student every two or three academic days. While young people tend to clash with one another at these ages, it is not likely that aggressive acts will normally occur with such frequency in typical middle class White schools. Beside physical force, other avenues of aggression and revenge are available to most youth, often of much more subtle nature than direct aggression.

Table 3-17.1. Multivariate Analysis of Variance Table for Factors Four, Five, and Six of Form A: Aggressive Acts Between and Within the Three Races.

Source of Variance	d/f_1	d/f_2	F	Decision
Race	24	642	5.8	Significant
SES	24	546	1.4	N. S.
Sex	12	324	1.4	N. S.
SES 1 vs SES 2 vs SES 3 in Asian Males	24	52	1.1	N. S.
SES 1 vs SES 2 vs SES 3 in Asian Females	16	62	.9	N. S.
SES 1 vs SES 2 & 3 in Black Males	10	23	.8	N. S.
SES 1 & 2 vs SES 3 in White Males	12	64	1.6	N. S.
SES 1 vs SES 2 & 3 in Black Females	10	37	.9	N. S.
SES 1 & 2 vs SES 3 in White Females	12	80	.9	N. S.

$F_{24,\infty}(.99) = 1.79$

Table 3-18.1. Mean Responses According to Race on Factors Four, Five, and Six of Form A: Aggressive Acts Between and Within the Three Racial Groups.

	Mean on Code Scale			Mean Response Choice			Univariate F-ratio	Decision
	Asians	Blacks	Whites	Asians	Blacks	Whites		
Aggressive Acts in Junior High by:								
45a Asians	.0	.1	.0	Never	Never	Never	1.1	N. S.
45b Blacks	.8	.3	.8	Rarely	Never	Rarely	11.9	Significant
45d Whites	.0	.1	.2	Never	Never	Never	2.9	N. S.
Arguments in Junior High School with:								
46a Asians	.2	.3	.2	Never	Never	Never	.2	N. S.
46b Blacks	.5	.9	.8	Never	Rarely	Rarely	5.4	Significant
46d Whites	.3	.8	.7	Never	Rarely	Never	11.1	Significant
Aggressive Acts in Senior High by:								
47a Asians	.0	.0	.0	Never	Never	Never	.1	N. S.
47b Blacks	.4	.1	.8	Never	Never	Rarely	26.6	Significant
47d Whites	.1	.2	.1	Never	Never	Never	2.7	N. S.
Arguments in Senior High School with:								
48a Asians	.3	.2	.3	Never	Never	Never	2.3	N. S.
48b Blacks	.4	.6	.7	Never	Never	Never	5.3	Significant
48d Whites	.3	.5	.7	Never	Never	Never	6.5	Significant

$F_{2,\infty}(.99) = 4.61$

In some respects, many parents and students might argue that an average of one extortion encounter per student over three years is too much, and with that argument one would find few dissenters. In any case, it is clear that not many specific students were necessarily singled out for repeated threats since students who reported that they were victimized invariably stated that it only happened once or twice. Very few students were repeatedly taken advantage of in this way.

Whereas threats upon the Asian student appeared to decline during the senior high school years, the same is not true for the White student who still reported an average of one violent encounter with Blacks during their senior high school years. Again, while these figures are low, in many respects they are higher than might be desired or expected in a school in a White middle class neighborhood.

During the junior high school years Blacks and Whites reported that they averaged one or two fights, quarrels, or arguments with other Blacks and Whites. Blacks report that aggressive encounters were had with other Blacks as well as with Whites. On the other hand, Whites report that their disagreements involved mainly Black students with almost no aggressive interactions with other White classmates. During the senior high school years these kinds of aggressive encounters declined in frequency. It could be that students began to relate to one another on a more friendly basis, or it could be that the two groups became more separated because of the Black power and Black identity movements. It might also be reasoned that the Black students who created most of the disturbances during the junior high school years had dropped out of school and were no longer around during the senior high school years. These and other explanations could be offered, but at best they are speculations. Other data, not available at this time, are needed to better understand what actually happened over the six year school period covered by these questions. However, it is safe to conclude that the reported encounters of violence between students were primarily instigated by Black students, being for the most part Asian-Black, White-Black, and Black against Black.

3-19. Linear Discriminant Analysis of the Aggressive Act Questions Between the Three Racial Groups.

Two statistically significant discriminant functions were generated from the original data matrix on questions 45, 46, 47, and 48. The functions are reported in Table 3-19.1. Since these functions are difficult to interpret in a meaningful way, they are not investigated any further.

3-20. Nested Comparisons Between the Three SES Groups Within the Sex by Race Groups on Factors Four Five, and Six of Form A: Aggressive Act Factor.

Differences across the three SES groups or the two sexes, as can be seen by examining the remaining F-ratios of Table 3-17.1, are not significant as a main effect or in the

Table 3-19.1. The Significant Linear Discriminant Functions Between the Three Races on the Aggressive Act Questions of Form A.

Aggressive Acts in Junior High by:	Function One	Function Two
45a Asians	1.26	-.54
45b Blacks	-.73	.63
45d Whites	.18	-.73
Arguments in Junior High School with:		
46a Asians	-.22	.35
46b Blacks	.84	-.15
46d Whites	.35	-.47
Aggressive Acts in Senior High by:		
47a Asians	.25	.90
47b Blacks	-.74	-1.14
47d Whites	-.43	.25
Arguments in Senior High School with:		
48a Asians	-.70	.60
48b Blacks	.15	.00
48d Whites	-.19	-.54

nested comparisons and are, therefore, of no further interest.

3-21. Questions of the 1966 Questionnaire that Related to Factors Four, Five, and Six of Form A.

Two items on the 1966 questionnaire were related to questions 45, 46, 47, and 48 of the 1970 questionnaire. These items are:

11. How did you get along with your classmates last year?

VERY WELL	FAIRLY WELL	NOT VERY WELL	NOT AT ALL

24. How do you get along with your classmates this year? Do you get along with them better, the same or worse than last year?

BETTER	THE SAME	WORSE

Question 11 was coded as:

3	2	1	0

while question 24 was coded as:

2	1	0

For interpretive purposes the corresponding intervals for these questions are given by:

3-2.25	2.25-1.50	1.50-.75	.75-0

and:

2-1.33	1.33-.67	.67-0

Differences between the sexes on these two questions were not significant. For males the mean responses were 2.5 (VERY WELL) and 1.3 (THE SAME). For the females the corresponding mean responses were 2.5 (VERY WELL) and 1.3 (THE SAME). While these items give no indication about arguments, ripping-off, and other forms of aggression, it appears that students got along quite well with one another in the beginning years of the reorganization.

3-22. Summary for the Aggressive Act Factor.

Differences between the races on the agressive act questions are statistically significant, F = 5.8. All other differences are non-significant.

Shaking downs and ripping-offs did not occur too often, but were definite experiences in the school as reported by Asians and Whites in their junior high school years. Aggressive acts involving an Asian or White student occur every two or three academic days.

In some respects, many parents and students might argue that an average of one extortion encounter per student over three years is too much, and with that argument one could find few dissenters. In any case, it is clear that not many specific students were necessarily singled out for repeated threats since students who reported that they were victimized invariably stated that it only happened once or twice. Very few students were repeatedly taken advantage of in this way.

Whereas threats upon the Asian student appeared to decline during the senior high school years, the same is not true for the White student who still reported an average of one violent encounter with Blacks during their senior high school years. Again, while these figures are low, in many respects they are higher than might be desired or expected in a school in a white middle class neighborhood.

During the junior high school years Blacks andWhites reported that they averaged one or two fights, quarrels, or arguments with other Blacks and Whites. Blacks report that aggressive encounters were had with other Blacks as well as with Whites. On the other hand, Whites report that their disagreements involved mainly Black students with almost no aggressive interactions with other White classmates. During the senior high school years these kinds of aggressive encounters declined in frequency. It could be that students began to relate to one another on a more friendly basis, or it could be that the two groups became more separated because of the Black power and Black identity movement. It might also be reasoned that the Black students who created most of the disturbances during the junior high school years had dropped out of school and were no longer around during the senior high school years. These and other explanations could be offered but at best they are specualtion. Other data, not available at this time, are needed to better understand what actually happened over the six year school period covered by these questions. However, it is safe to conclude that the reported encounters of violence between students were primarily instigated by Black students, being for the most part Asian-Black, White-Black, and Black against Black.

3-23. Analysis of Item 41 of Form A: Attendance at a Mainly One Race School.

The response choices for each of the three items of question 41 in which the graduating seniors were asked how well they would have liked attending a school consisting of classmates from mainly one race are given by:

VERY WELL	WELL	NOT VERY WELL	NOT AT ALL

These choices have been scored for analytical purposes as:

3	2	1	0

To simplify the discussion and interpretation of the resulting statistics, the four point scale is divided into four equal width intervals given by:

3-2.25	2.25-1.50	1.50-.75	.75-0

The complete set of F-ratios for this question is reported in Table 3-23.1. Significant sources of variance are subjected to post hoc analyses. Non-significant differences are not investigated in any detail. Where necessary, groups have been combined together so as to generate valid F-ratios. Since only three items are involved in this analysis, no discussion is given to the discriminant function.

3-24. Differences Between the Three Races on Question 41: Attendance at a Mainly One Race School.

Differences between the races on how well they like a racially segregated school are statistically significant. Mean profiles across the three racial groups are reported in Table 3-24.1. Asians report that they would NOT VERY WELL enjoy attending a school that was mainly Asian, Black, or White. The same statement applies to the White students. However, Blacks report that they would enjoy attending a school that was mainly Black. For them the typical response is that they would like it WELL. This preference on the part of Blacks could reflect the growing Black power and separatist movement among Blacks for separate school and separate school programs. Unfortunately, no data is available to defend or disprove this point and so a clear explanation for this racial difference is not available.

3-25. Differences Between the Three SES Groups on Factor Seven of Form A: Attendance at a Mainly One Race School.

Differences in responses between students in the three different SES sections of the community are statistically significant. Mean values on the three parts of question 41 across the three SES groups are reported in Table 3-25.1. As can be seen by examination of these mean values, the major source of the significance can be attributed to the way students in the

Table 3-23.1. Multivariate Analysis of Variance Table for Factor Seven of Form A: Attendance at a Mainly One Race School.

Source of Variance	d/f_1	d/f_2	F	Decision
Race	6	660	18.1	Significant
SES	6	662	4.3	Significant
Sex	3	333	5.0	Significant
SES 1 vs SES 2 vs SES3 in Asian Males	6	70	.6	N. S.
SES 1 vs SES 2 vs SES 3 in Asian Females	6	72	1.0	N. S.
SES 1 vs SES 2 & 3 in Black Males	3	30	2.5	N. S.
SES 1 & 2 vs SES 3 in White Males	3	73	1.3	N. S.
SES 1 vs SES 2 & 3 in Black Females	3	45	1.8	N. S.
SES 1 & 2 vs SES 3 in White Females	3	89	3.0	N. S.

$F_{6,\infty}(.99) = 2.80$

Table 3-24.1. Mean Responses According to Race on Factor Seven of From A: Attendance at a Mainly One Race School.

		Mean on Code Scale			Mean Response Choice			Univariate	
		Asians	Blacks	Whites	Asians	Blacks	Whites	F-ratio	Decision
41a:	Attend a Mainly Asian School	1.4	.9	1.2	Not Very Well	Not Very Well	Not Very Well	2.5	N. S.
41b:	Attend a Mainly Black School	1.1	1.8	1.1	Not Very Well	Well	Not Very Well	27.3	Significant
41d:	Attend a Mainly White School	1.4	1.1	1.4	Not Very Well	Not Very Well	Not Very Well	3.9	N. S.

$F_{2,\infty}(.99) = 4.61$

Table 3-25.1. Mean Responses According to SES Group on Factor Seven of From A: Attendance at a Mainly One Race School.

		Mean on Code Scale			Mean Response Choice				
		Low	Medium	High	Low	Medium	High	Univariate F-ratio	Decision
41a:	Attend a Mainly Asian School	1.3	1.3	1.3	Not Very Well	Not Very Well	Not Very Well	.0	N. S.
41b:	Attend a Mainly Black School	1.6	1.1	1.1	Well	Not Very Well	Not Very Well	9.9	Significant
41d:	Attend a Mainly White School	1.2	1.3	1.3	Not Very Well	Not Very Well	Not Very Well	.2	N. S.

$F_{2,\infty}(.99) = 4.61$

low SES group respond to attending a school that is mainly Black. For these students the typical response choice is WELL. Since the students in these SES regions are mainly Black, this outcome is not surprising as it is in direct agreement with the findings reported for the differences between the races on these three items.

3-26. Differences Between the Two Sexes on Factor Seven of Form A: Attendance at a Mainly One Race School.

While the differences between the sexes are statistically significant, they are not large enough to be interpreted in a meaningful manner. The significant F-ratios might only be a function of the large sample sizes and high statistical power associated with large samples. For completeness, the mean profiles on these items are reported in Table 3-26.1.

3-27. Nested Comparisons Between the Three SES Groups Within the Sex by Race Groups on Factor Seven.

None of the nested mean differences are statistically significant and for this reason will not receive further attention.

3-28. Questions of the 1966 Questionnaire that Relate to Factor Seven of Form A.

Two questions related to question 41 appeared on the 1966 questionnaire. These questions are:

6. How well did you like the school you attended last year?

VERY WELL   FAIRLY WELL   NOT VERY WELL   NOT AT ALL

19. How well do you like the school you are attending this year? Do you like it more, the same, or less than the one you attended last year?

MORE   THE SAME   LESS

These items were coded as:

3   2   1   0

and:

2   1   0

and related to the following sets of equal width intervals:

3-2.25   2.25-1.50   1.50-.75   .75-0

and:

2-1.33   1.33-.67   .67-0

Table 3-26.1. Mean Responses According to Sex on Factor Seven of Form A: Attendance at a Mainly One Race School.

		Mean on Code Scale		Mean Response Choice		Univariate F-ratio	Decision
		Males	Females	Males	Females		
41a:	Attend a Mainly Asian School	1.4	1.2	Not Very Well	Not Very Well	8.0	Significant
41b:	Attend a Mainly Black School	1.2	1.2	Not Very Well	Not Very Well	.0	N. S.
41d:	Attend a Mainly White School	1.4	1.1	Not Very Well	Not Very Well	12.6	Significant

$F_{2,\infty}(.99) = 4.61$

The mean responses for boys to these two questions are 2.0 (FAIRLY WELL) and 1.1 (THE SAME). For girls the mean responses are 1.9 (FAIRLY WELL) and .9 (THE SAME). Apparently, both groups of students liked their first two years of their schooling in the integration program. Among the Black students, the mean responses are given by 1.9 (FAIRLY WELL) and .9 (THE SAME). For Whites, the mean responses are 2.1 (FAIRLY WELL) and 1.2 (THE SAME). Even across the two racial groups, attendance at the integrated school was acceptable. However, as noted at graduation, Blacks would prefer attendance at a mainly Black school.

3-29. Summary for Attendance at a Mainly One Race School Factor.

Differences between the races on how well they like a racially segregated school are statistically significant, with F = 18.1. Asians report that they would NOT VERY WELL enjoy attending a school that was mainly Asian, Black, or White. The same statement applies to the White students. However, Blacks report that they would enjoy attending a school that was mainly Black. For them the typical response is that they would like it WELL. This preference on the part of Blacks could reflect the growing Black power and separatist movement among Blacks for separate schools and separate school programs. Unfortunately, no data is available to defend or disprove this point and so a clear explanation for this racial difference is not available.

Differences in responses between students in the three different SES sections of the community are statistically significant, F = 4.3. The major source of the significance can be attributed to the way students in the low SES group respond to attending a school that is mainly Black. For these students the typical response choice is WELL. Since the students in these SES regions are mainly Black, this outcome is not surprising as it is in direct agreement with the findings reported for the differences between the races on these three items.

While the differences between the sexes are statistically significant, they are not large enough to be interpreted in a meaningful manner.

3-30. Analysis of Perceived Social Mixing Between and Within Races.

The response choices for Questions 14 and 16 which refer to the frequency of interracial social mixing are given by:

VERY OFTEN	OFTEN	NOT VERY OFTEN	NEVER

These response choices have been scored for analytical purposes as:

3	2	1	0

To simplify the discussion and interpretation of the data the four point scale is divided into four equal width intervals given by:

3-2.25	2.25-1.50	1.50-.75	.75-0

The complete set of F-ratios for the analysis of questions 14 and 16 is reported in Table 3-30.1. Significant sources of variance are subjected to post hoc analyses while non-significant differences are simply reported as such. Where necessary, groups have been combined together so as to produce F-ratios that could be related to tables of the F-distribution.

3-31. Differences Between the Three Races on the Perception of Social Mixing Factor of Form A.

The mean profiles between the three racial groups are statistically different from one another. The average values for the responses to questions 14 and 16 are reported in Table 3-31.1. As indicated by the mean values, interracial mixing appears to have increased from the junior to the senior high school years. During the junior high school years, students of the three different races reported that Asians and Blacks mixed and talked to each other NOT VERY OFTEN. However, in the senior high school years these same students reported that Asians and Blacks could be seen together OFTEN. In the junior high school years Asians and Whites were seen to mix OFTEN by all three races of students, but in the senior high school years Asians and Whites reported that they mixed in social situations VERY OFTEN. In junior high school years Blacks and Whites were reported as mixing NOT VERY OFTEN by members of the three racial groups, but during the senior high school years Blacks and Whites were seen mixing OFTEN by all three racial groups. As these statistics suggest, students of different races mix socially with one another in the school environment and as suggested by responses to questions 15, 17, 18, and 19, these social interchanges lead to a few close friendships or to the development of many acquaintances. It should be noted that the increase in racial mixing during the senior high school years corresponds with the reduction of violence as measured by questions 45, 46, 47, and 48. Since one of the objectives of school integration is to bring students of different races together, there is some

Table 3-30.1. Multivariate Analysis of Variance Table for Factors Eight, Nine, and Ten of Form A: Perceived Social Mixing Between and Within Races.

Source of Variance	d/f_1	d/f_2	F	Decision
Race	12	654	3.1	Significant
SES	12	656	4.0	Significant
Sex	6	330	1.8	N. S.
SES 1 vs SES 2 vs SES 3 in Asian Males	6	64	.8	N. S.
SES 1 vs SES 2 vs SES 3 in Asian Females	12	66	1.2	N. S.
SES 1 vs SES 2 & 3 in Black Males	6	27	1.4	N. S.
SES 1 & 2 vs SES 3 in White Males	6	70	2.0	N. S.
SES 1 vs SES 2 & 3 in Black Females	6	42	1.2	N. S.
SES 1 & 2 vs SES 3 in White Females	6	86	1.4	N. S.

$F_{12,\infty}(.99) = 1.79$

Table 3-31.1. Mean Responses According to Race on Factors Eight, Nine, and Ten of Form A: Perceived Social Mixing.

	Mean Code Scale			Mean Response Choice			Univariate	
	Asians	Blacks	Whites	Asians	Blacks	Whites	F-ratio	Decision
Social Mixing in Junior High School by:								
14a Asians and Blacks	1.3	1.3	1.3	Not Very Often	Not Very Often	Not Very Often	.0	N. S.
14b Asians and Whites	2.0	1.7	2.1	Often	Often	Often	6.8	Significant
14d Blacks and Whites	1.2	1.5	1.4	Not Very Often	Not Very Often	Not Very Often	4.0	N. S.
Social Mixing in Senior High School by:								
16a Asians and Blacks	1.7	1.8	1.7	Often	Often	Often	.4	N. S.
16b Asians and Whites	2.3	2.1	2.3	Very Often	Often	Very Often	3.2	N. S.
16d Blacks and Whites	1.8	2.1	2.0	Often	Often	Often	4.6	N. S.

$F_{2,\infty}(.99) = 4.61$

evidence that this occurred at Berkeley High School during the integration period under study.

3-32. Linear Discriminant Analysis of the Perceived Social Mixing Factor Between the Three Racial Groups.

One statistically significant linear discriminant function was generated from the data matrix. The coefficients that define this function are reported in Table 3-32.1. As can be seen, the function is negatively weighted by items relating to Asian and White mixing and positively weighted by items relating to Black and White mixing. This suggests that students viewed these two kinds of mixing as occurring in different frequencies. If Asian andWhite mixing was seen OFTEN, then Black and White mixing was seen NEVER, and vice versa. As the mean values suggest, it is the perceptions of the Asians and Blacks that are mainly responsible for the existance of this discriminant function. It appears that Asians saw less Black-White mixing than did Blacks, while Blacks saw less Asian-White mixing than did the Asians.

3-33. Differences Between the Three SES Groups on Factors Eight, Nine, and Ten of Form A: Perceived Social Mixing.

Differences between the three SES groups are statistically significant. The average proviles are reported in Table 3-33.1. The major source of variance appears to relate to item 14b. Students in the low SES areas saw Blacks and Whites as mixing OFTEN during their junior high school years while students in the medium and high SES areas reported such mixing as happening NOT VERY OFTEN.

3-34. The Significant Linear Discriminant Function Between the Three SES Groups on the Perception of Social Mixing Factor of From A.

Even though one statistically significant linear discriminant function is associated with the responses to questions 14 and 16, it is difficult to interpret and therefore will not be analyzed.

3-35. Differences Between the Two Sexes on Factors Eight, Nine, and Ten of Form A: Perception of Social Mixing.

Differences between the sexes are not statistically significant and therefore need no discussion.

Table 3-32.1. The Significant Linear Discriminant Function Between the Three Races on the Perception of Social Mixing Factor of Form A.

	Function
Social Mixing in Junior High by:	
14a Asians and Blacks	-.02
14b Asians and Whites	-.79
14d Blacks and Whites	.69
Social Mixing in Senior High by:	
16a Asians and Blacks	.04
16b Asians and Whites	-.64
16d Blacks and Whites	.76
Mean Value	50
Asian	39.6
Black	61.2
White	43.0
Relative Deviate Value	
Asian	-1.37
Black	1.17
White	-.70

Table 3-33.1. Mean Responses According to SES Group on Factors Eight, Nine, and Ten of Form A: Perceived Social Mixing.

	Mean on Code Scale			Mean Response Choice			Univariate F-ratio	Decision
	Low	Medium	High	Low	Medium	High		
Social Mixing in Junior High by:								
14a Asians and Blacks	1.4	1.3	1.2	Not Very Often	Not Very Often	Not Very Often	3.1	N. S.
14b Asians and Whites	1.8	1.9	2.1	Often	Often	Often	5.5	Significant
14d Blacks and Whites	1.6	1.3	1.3	Often	Not Very Often	Not Very Often	4.0	N. S.
Social Mixing in Senior High by:								
16a Asians and Blacks	1.8	1.8	1.6	Often	Often	Often	4.7	Significant
16b Asians and Whites	2.2	2.2	2.3	Often	Often	Very Often	.5	N. S.
16d Blacks and Whites	2.1	1.8	2.0	Often	Often	Often	4.7	Significant

$F_{2,\infty}(.99) = 4.61$

3-36. Nested Comparisons Between the Three SES Groups Within the Sex by Race Groups on Factors Eight, Nine, and Ten of Form A: Perception of Social Mixing Between and Within the Three SES Groups.

None of the differences are significant and are, therefore, not analyzed.

3-37. Questions of the 1966 Questionnaire that Relate to Factors Eight, Nine, and Ten of Form A.

Two questions of the 1966 questionnaire were related to questions 14 and 16 of the 1970 questionnaire. These are:

12. Did Negro and White students mix and talk to each other at your school last year?

VERY OFTEN FAIRLY OFTEN NOT VERY OFTEN NOT AT ALL

25. How often do Negro and White students mix and talk to each other at your school this year?

MORE THAN LAST YEAR SAME AS LAST YEAR LESS THAN LAST YEAR

Question 12 was coded as follows:

3 2 1 0

while question 25 was coded as:

2 1 0

For interpretive purposes the following sets of equal width intervals were assigned to the discrete scale:

3-2.25 2.25-1.50 1.50-.75 .75-0

and:

2-1.33 1.33-.67 .67-0

For the boys, the mean responses to these two questions are given by 1.9 (FAIRLY OFTEN)and 1.6 (MORE THAN LAST YEAR). For the girls, the corresponding mean responses are given by 1.9 (FAIRLY OFTEN) and 1.5 (MORE THAN LAST YEAR). Thus, both males and females reported that Blacks and Whites mixed fairly often and that during the second year of the integration the amount of interracial mixing increased. These statistics do not agree with those reported in 1970. Both Black and White students reported that Blacks and Whites mixed FAIRLY OFTEN during the first year of the integration program and that during the second year they mixed MORE THAN LAST YEAR. Also, this does not agree with the statistics obtained from the 1970 questionnaire. Most likely, students have forgotten what happened during the early years of the integration program.

3-38. Summary for the Perceived Social Mixing Factor.

The mean profiles between the three racial groups are statistically different from one another, F = 3.1. Interracial mixing appears to have increased from the junior to the senior high school years. During the junior high school years, students of the three different races reported that Asians and Blacks mixed and talked to each other NOT VERY OFTEN. However, in the senior high school years these same students reported that Asians and Blacks could be seen together OFTEN. In the junior high school years Asians and Whites were seen to mix OFTEN by all three races of students, but in the senior high school years Asians and Whites reported that they mixed in social situations VERY OFTEN. In junior high school years Blacks and Whites were reported as mixing NOT VERY OFTEN by members of the three racial groups, but during the senior high school years Blacks and Whites were seen mixing OFTEN by all three racial groups. As these statistics suggest, students of different races mix socially with one another in the school environment and as suggested these social interchanges lead to a few close friendships or to the development of many acquaintances. It should be noted that the increase in racial mixing during the senior high school years corresponds with the reduction of violence. Since one of the objectives of school integration is to bring students of different races together, there is some evidence that this occurred at Berkeley High School during the integration period under study.

Differences between the three SES groups are statistically significant, F = 4.0. Students in the low SES areas saw Blacks and Whites as mixing OFTEN during their junior high school years while the students in the medium and high SES areas reported such mixing as happening NOT VERY OFTEN.

Differences between the sexes are not statistically significant.

Chapter Four: Analysis of Questions Appearing on Form B.

4-1. Items of Form B That Were Identical to, Similar to, or Related to the Items of the 1966 Questionnaire.

Of the more than 150 items contained on Form B, nine are directly related to those asked of the students in the 1966 questionnaire given when the students were eighth graders and had completed a second year of the integration program. These nine items are listed in Table 4-1.1. Because of the manner in which these items were stated, no factor analysis was performed on the set of responses. Instead, three separate multivariate analyses were performed upon items 15a, 26a, and 27a, 15b, 26b, and 27b, and 15c, 26c, and 27c. The three sample correlation matrices for these three sets of data are shown in Table 4-1.2. To achieve an $\alpha \leq .01$ control across all three matrices, any correlation exceeding .25 is significant. For all three types of classes, responses to questions 26 and 27 show a moderate degree of correlation. This suggests that the level of difficulty of classroom assignments is positively correlated with the amount of work expected by the teachers. Teachers who gave difficult assignments expected their students to work, whereas teachers who gave easy assignments also expected little effort on the part of their students.

4-2. Multivariate Analysis of Variance for the Items of Form B: Classroom Work Activities.

For these analyses, student responses were removed if they reported that they DID NOT HAVE MANY CLASSES OF THIS KIND. Upon this removal, the response choices to questions 15, 26, and 27 are given respectively by:

VERY WELL	FAIRLY WELL	NOT VERY WELL	NOT AT ALL
VERY DIFFICULT	MODERATELY DIFFICULT	MODERATELY EASY	VERY EASY

and:

TOO MUCH	QUITE A LOT	A LITTLE	NONE AT ALL

For analytical purposes, these were all coded as:

4	3	2	1

For interpretive purposes, this four point scale has been divided into the following four equal width intervals:

4-3.25	3.25-2.50	2.50-1.75	1.75-1.00

Table 4-1.1. Items of Form B that Were Identical to, Similar to, or Related to the Items of the 1966 Questionnaire.

15. How well did YOU like the classes that were:

15a	Mainly Black?	VERY WELL	FAIRLY WELL	NOT VERY WELL	NOT AT ALL	DID NOT HAVE MANY CLASSES OF THIS KIND
15b	Racially Mixed?	VERY WELL	FAIRLY WELL	NOT VERY WELL	NOT AT ALL	DID NOT HAVE MANY CLASSES OF THIS KIND
15c	Mainly White?	VERY WELL	FAIRLY WELL	NOT VERY WELL	NOT AT ALL	DID NOT HAVE MANY CLASSES OF THIS KIND

26. How EASY or DIFFICULT were the assignments in classes that were:

26a	Mainly Black?	VERY DIFFICULT	MODERATELY DIFFICULT	MODERATELY EASY	VERY EASY	DID NOT HAVE MANY CLASSES OF THIS KIND
26b	Racially Mixed?	VERY DIFFICULT	MODERATELY DIFFICULT	MODERATELY EASY	VERY EASY	DID NOT HAVE MANY CLASSES OF THIS KIND
26c	Mainly White?	VERY DIFFICULT	MODERATELY DIFFICULT	MODERATELY EASY	VERY EASY	DID NOT HAVE MANY CLASSES OF THIS KIND

27. How much WORK did teachers expect from the students in classes that were:

27a	Mainly Black?	TOO MUCH	QUITE A LOT	A LITTLE	NONE AT ALL	DID NOT HAVE MANY CLASSES OF THIS KIND
27b	Racially Mixed?	TOO MUCH	QUITE A LOT	A LITTLE	NONE AT ALL	DID NOT HAVE MANY CLASSES OF THIS KIND
27c	Mainly White?	TOO MUCH	QUITE A LOT	A LITTLE	NONE AT ALL	DID NOT HAVE MANY CLASSES OF THIS KIND

Table 4-1.2. Correlation Matrices for the Items of Table 4-1.1.

Correlation Matrix for Mainly Black Classes

Item	15a	26a	27a
15a	1.00	.28	.35
26a		1.00	.58*
27a			1.00

Correlation Matrix for Racially Mixed Classes

Item	15b	26b	27b
15b	1.00	.21	.27
26b		1.00	.43*
27b			1.00

Correlation Matrix for Mainly White Classes

Item	15c	26c	27c
15c	1.00	.12	.09
26c		1.00	.46*
27c			1.00

*$r^2 > .0625$. Each r^2 is tested against a Type I error rate of $\alpha \leq .001$ so that the total $\alpha_T < .01$.

Since a number of students reported that they had only classes that were mainly Black or White, separate multivariate analyses of variance were performed on the a, b, and c parts of each question. Since responses by SES are correlated to race, it was decided not to include any SES comparisons for the analysis of these items. The multivariate F-ratios for these analyses are summarized in Table 4-2.1.

4-3. Differences Between the Three Races on the Items of Form B: Classroom Work Activities.

Differences between the races are significant for classes whose composition are mainly Black or mainly White. Differences are not significant for the racially mixed classes. Mean values are summarized in Table 4-3.1. While Blacks report that they like mainly Black classes VERY WELL, Asians and Whites report they like them FAIRLY WELL. It is worth noting that the average value of 2.6 for Asian students is quite close to the response choice NOT VERY WELL. On the average, students of all three races agree that class assignments are MODERATELY EASY in mainly Black classes. However, Blacks report that teachers expect QUITE A LOT while Asians and Whites report that teachers expect A LITTLE in classes that are mainly Black. Whether or not teachers expect more of Black students in these classes is questionable. That Black students perceive this as part of the mainly Black classroom is apparent, but they also report that teachers in racially mixed and mainly White classes expect QUITE A LOT of work from their students.

In the racially mixed classes, Black students report that they like the racially mixed classes VERY WELL, while Asians and Whites report that they like these classes FAIRLY WELL. Asians and Blacks report that class assignments are MODERATELY DIFFICULT while Whites think they are MODERATELY EASY. However, all three groups think teachers expect QUITE A LOT. In the mainly White classes, Asians and Whites report that they like their classes FAIRLY WELL, while Blacks report that they like their mainly White classes NOT VERY WELL. On the other hand, all three groups of students report that class assignments are MODERATELY DIFFICULT and that teachers expect QUITE A LOT.

It is apparent that most students prefer racially mixed classes over mainly Black or mainly White classes. Students think that teachers give MODERATELY DIFFICULT to MODERATELY EASY class assignments in mixed classes and they expect the students to work for their grades. In the mainly White classes, teachers give MODERATELY DIFFICULT class assignments. In addition, Blacks seem to like these classes NOT VERY WELL. Asians do not enjoy their mainly Black classes and all students placed in these classes think they are not too difficult. This also applies to the Blacks, but these students report that teachers expect QUITE A LOT of them.

Table 4-2.1. Multivariate Analysis of Variance Table for the Items of Form B: Classroom Work Activities.

Source of Variance	d/f_1	d/f_2	F	Decision
Race in Mainly Black Classes	6	318	4.0	Significant
Sex in Mainly Black Classes	3	160	3.0	N. S.
Race in Racially Mixed Classes	6	556	2.0	N. S.
Sex in Racially Mixed Classes	3	279	4.7	Significant
Race in Mainly White Classes	6	534	4.0	Significant
Sex in Mainly White Classes	3	268	1.0	N. S.

$F_{6,\infty}(.99) = 2.80$ $F_{3,\infty}(.99) = 3.78$

Table 4-3.1. Mean Responses According to Race on Items of Form B: Classroom Work Activities.

	Mean on Code Scale			Mean Response Choice			Univariate F-ratio	Decision
	Asians	Blacks	Whites	Asians	Blacks	Whites		
How Classes Were Liked That Were:								
15a Mainly Black	2.6	3.3	2.9	Fairly Well	Very Well	Fairly Well	7.7	Significant
15b Racially Mixed	3.2	3.3	3.2	Fairly Well	Very Well	Fairly Well	1.1	N. S.
15c Mainly White	2.8	2.5	3.0	Fairly Well	Not Very Well	Fairly Well	10.0	Significant
Difficulty of Assignments in Classes That Were:								
26a Mainly Black	1.9	2.3	2.0	Moderately Easy	Moderately Easy	Moderately Easy	3.7	N. S.
26b Racially Mixed	2.6	2.6	2.4	Moderately Difficult	Moderately Difficult	Moderately Difficult	1.9	N. S.
26c Mainly White	3.0	3.0	2.9	Moderately Difficult	Moderately Difficult	Moderately Difficult	.5	N. S.
Teacher Work Expectations in Classes That Were:								
27a Mainly Black	2.1	2.7	2.3	A Little	Quite a Lot	A Little	8.8	Significant
27b Racially Mixed	2.6	2.8	2.6	Quite a Lot	Quite a Lot	Quite a Lot	4.6	N. S.
27c Mainly White	3.0	3.0	3.0	Quite a Lot	Quite a Lot	Quite a Lot	.3	N. S.

$F_{2,\infty}(.99) = 4.61$

4-4. Differences Between the Two Sexes on the Items of Form B: Classroom Work Activities.

Differences between the sexes, as indicated by the large F-ratios in Table 4-2.1, are significant for the racially mixed classes only. Mean values are reported in Table 4-4.1. In these classes, boys report that they like their classes FAIRLY WELL while girls report that they like their classes VERY WELL. On the other hand, both boys and girls report that the work assignments are MODERATELY EASY and that teachers expect QUITE A LOT of work from the students in racially mixed classes. These findings appear to be inconsistent and perhaps indicate that teachers give many assignments that are not very challenging. In the mainly Black classes, assignments are thought to be MODERATELY EASY by both boys and girls and in the mainly White classes, they agree that class work required is QUITE A LOT.

Thus, both boys and girls report that class assignments increase in difficulty as the proportion of White students increases. At the same time, the amount of work expected by a teacher increases as the proportion of White students increases. As recalled, the correlations between these two variables for the three kinds of class composition are given by .58, .43, and .46.

4-5. Questions of the 1966 Questionnaire that Relate to the Items of Form B.

Two related questions appeared on the 1966 questionnaire. These questions are:

7. How hard did you find the work in school last year?

VERY HARD FAIRLY HARD FAIRLY EASY VERY EASY

20. Do you think the work in school this year is harder, the same as, or easier than it was last year?

HARDER THE SAME EASIER

These items were coded for analytical purposes as:

3 2 1 0

and:

2 1 0

and related to the following equal width intervals:

3-2.25 2.25-1.50 1.50-.75 .75-0

and:

2-1.33 1.33-.67 .67-0

Table 4-4.1. Mean Responses According to Sex on Items of Form B: Classroom Work Activities.

	Mean on Code Scale		Mean Response Choice		Univariate F-ratio	Decision
	Males	Females	Males	Females		
How Classes Were Liked That Were:						
15a Mainly Black	2.9	3.1	Fairly Well	Fairly Well	4.1	N. S.
15b Racially Mixed	3.1	3.4	Fairly Well	Fairly Well	13.7	Significant
15c Mainly White	2.9	2.9	Fairly Well	Fairly Well	.1	N. S.
Difficulty of Assignments in Classes That Were:						
26a Mainly Black	2.1	2.0	Moderately Easy	Moderately Easy	.5	N. S.
26b Racially Mixed	2.4	2.5	Moderately Easy	Moderately Easy	1.1	N. S.
26c Mainly White	2.9	3.0	Moderately Difficult	Moderately Difficult	2.2	N. S.
Teacher Work Expectations in Classes That Were:						
27a Mainly Black	2.4	2.5	A Lot	A Lot	1.7	N. S.
27b Racially Mixed	2.6	2.7	Quite a Lot	Quite a Lot	2.7	N. S.
27c Mainly White	2.9	3.0	Auite a Lot	Quite a Lot	2.3	N. S.

$F_{2,\infty}(.99) = 4.61$

During the first two years of the integration program, both mailes and females reported that classroom assignments during the first year were FAIRLY EASY in difficulty with mean value of 1.5 and that during the second year they became harder. Across the two racial groups the mean responses by Blacks were 1.5 (FAIRLY EASY) and 1.3 (THE SAME) while the mean responses by Whites were 1.5 (FAIRLY EASY) and 1.6 (HARDER). These statistics do not agree with the mean values reported in the 1970 questionnaire. It is possible that as the integration program proceeded, teachers actually did demand more from the Black students than they did when the integration program first began.

4-6. Summary for the Form B Items.

Differences between the races are significant for classes whose composition is mainly Black or mainly White, with F = 4.0 for both groups. Differences are not significant for the racially mixed classes. While Blacks report that they like mainly Black classes VERY WELL, Asians and Whites report that they like them FAIRLY WELL. It is worth noting that the average value of 2.6 for Asian students is quite close to the response choice NOT VERY WELL. On the average, students of all three races agree that class assignments are MODERATELY EASY in mainly Black classes. However, Blacks report that teachers expect QUITE A LOT while Asians and Whites report that teachers expect A LITTLE in classes that are mainly Black. Whether or not teachers expect more of Black students in these classes is questionable. That Black students perceive this as part of the mainly Black classroom is apparent, but they also report that teachers in racially mixed and mainly White classes expect QUITE A LOT of work from their students.

In the racially mixed classes, Black students report that they like the racially mixed classes VERY WELL, while Asians and Whites report that they like these classes FAIRLY WELL. Asians and Blacks report that class assignments are MODERATELY DIFFICULT while Whites think they are MODERATELY EASY. However, all three groups think teachers expect QUITE A LOT. In the mainly White classes, Asians and Whites report that they like their classes FAIRLY WELL, while Blacks report that they like their mainly White classes NOT VERY WELL. On the other hand, all three groups of students report that class assignments are MODERATELY DIFFICULT and that teachers expect QUITE A LOT.

It is apparent that most students prefer racially mixed classes over mainly Black or mainly White classes. Students think that teachers give MODERATELY DIFFICULT to MODERATELY EASY class assignments in mixed classes and they expect the students to work for their grades. In the mainly White classes, teachers give MODERATELY DIFFICULT class assignments. In addition, Blacks seem to like these classes NOT VERY WELL. Asians do not enjoy their mainly Black classes and all students placed in these classes think they are not too difficult. This also applies to the Blacks, but these students report that teachers expect QUITE A LOT of them.

Differences between the sexes are significant for the racially mixed classes only, with F = 4.7. In these classes, boys report that they like their classes FAIRLY WELL while girls report that they like their classes VERY WELL. On the other hand, both boys and girls report that the work assignments are MODERATELY EASY and that teachers expect QUITE A LOT of work from the students in racially mixed classes. These findings appear to be inconsistent and perhaps indicate that teachers give many assignments that are not very challenging. In the mainly Black classes, assignments are thought to be MODERATELY EASY by both boys and girls and in the mainly White classes, they agree that class work required is QUITE A LOT. Thus, both boys and girls report that class assignments increase in difficulty as the proportion of White students increases.

Chapter Five: Analysis of Questions Appearing on Form C.

5-1. Items of Form C That Were Identical to, Similar to, or Related to the Items of the 1966 Questionnaire.

Of the more than 150 items contained on Form C, nine are directly related to those asked of the students in the 1966 questionnaire. These nine items are listed in Table 5-1.1. Since the number of items to be analyzed is small, no attempt was made to group or cluster them. However, for completeness, the correlation matrix for these nine items is reported in Table 5-1.2. As can be seen, only three correlation coefficients exceed .40 in absolute values. These three correlations with numerical values of .60, .48, and .51 involve items 14a and 14d, 24a and 24b, and 24c and 24d, respectively. The large correlation coefficient of $r = .60$ suggests that graduates with few Asian friends tend to have few White friends, while graduates with many Asian friends tend to have many White friends. The second correlation suggests that graduates who perceived Asian males and Black females dating also report that they observed Asian females and Black males dating, whereas those who did not perceive one type of these datings also did not perceive the other type of dating. Finally, the same kind of correlation and dating patterns exist for the dating of Asian males and White females and for the dating of Asian females and White males.

5-2. Multivariate Analysis of Variance for the Items of Form C: Interracial Social Dating.

The results of the multivariate analysis of variance on items 14 and 24 are reported in Table 5-2.1. As can be seen, the differences between the races and the three SES levels among the Asians are not significant sources of group differences. It should also be noted that the SES mean differences among the Asians and Blacks have not been analyzed on the basis of sex since the number of boys and girls in the sample was small. Even though the differences between the races are not significant at $\alpha \leq .01$, the SES differences which tend to be correlated with race are significant at $\alpha \leq .01$. It should be noted, however, that the race differences are significant at $\alpha \leq .05$ and because of their general correlation with SES differences, are examined.

The scoring method used for these items should be reviewed before an understanding can be had of the resulting F-ratios and mean responses values across the compared groups of students. The response choices for Question 14 are given by:

VERY MANY MANY SOME FEW NONE

These were further refined for the benefit of the responding

Table 5-1.1. Items of Form C That Were Identical to, Similar to, or Related to the Items of the 1966 Questionnaire.

14. How many friends to YOU have at BHS who are:

	(11 or more)	(6-10)	(3-5)	(1-2)	(0)
14a Asian?	VERY MANY	MANY	SOME	FEW	NONE
14b Black?	VERY MANY	MANY	SOME	FEW	NONE
14d White?	VERY MANY	MANY	SOME	FEW	NONE

24. At BHS, how often did students of different races date each other if the students were:

24a Asian male and Black female?	OFTEN	ONCE IN A WHILE	NEVER
24b Asian female and Black male?	OFTEN	ONCE IN A WHILE	NEVER
24c Asian male and White female?	OFTEN	ONCE IN A WHILE	NEVER
24d Asian female and White male?	OFTEN	ONCE IN A WHILE	NEVER
24e Black male and White female?	OFTEN	ONCE IN A WHILE	NEVER
24f Black female and White male?	OFTEN	ONCE IN A WHILE	NEVER

Table 5-1.2. Correlation Matrix for the Items of Table 5-1.1.

Items	14a	14b	14d	24a	24b	24c	24d	24e	24f
14a	1.00	.18	.60*	.04	.12	.13	.27	-.09	.01
14b		1.00	.27	.09	.15	.02	.02	.17	.20
14d			1.00	-.05	.07	.10	.15	-.04	-.01
24a				1.00	.48*	.22	.14	.11	.35
24b					1.00	.29	.26	.15	.24
24c						1.00	.51*	.16	.22
24d							1.00	.11	.10
24e								1.00	.24
24f									1.00

*$r^2 > .16$. Each r^2 is tested against a Type I error rate of $\alpha \leq .003$ so that the total $\alpha_T < .01$.

Table 5-2.1. Multivariate Analysis of Variance Table for the Items of Form B: Interracial Social Dating.

Source of Variance	d/f_1	d/f_2	F	Decision
Race	18	566	1.8	N. S.
SES	18	570	6.5	Significant
Sex	9	286	1.0	N. S.
SES 1 vs SES 2 vs SES 3 in Asians	18	48	.7	N. S.
SES 1 vs SES 2 vs SES 3 in Blacks	18	152	4.4	Significant
SES 1 vs SES 2 vs SES 3 in White Males	18	140	2.5	Significant
SES 1 vs SES 2 vs SES 3 in White Females	18	160	2.9	Significant

$F_{18,\infty}(.99) = 2.0$ $F_{9,\infty}(.99) = 2.4$

students to read:

(11 or more)   (6-10)   (3-5)   (1-2)   (0)

For analytical purposes these qualitative response choices were coded as:

4   3   2   1   0

Even though the original scale values are not on an equal interval scale, the coded scale is partitioned into the following five equal width continuous intervals:

4-3.2   3.2-2.4   2.4-1.6   1.6-.8   .8-0

mainly to facilitate interpretation. For interpretive purposes all responses are transformed from the interval scale back to the original scales so as to make response choices agree with student interpretations of the scales.

The response scale of Question 24 was defined by the following three point scale:

OFTEN   ONCE IN A WHILE   NEVER

which has been coded as:

2   1   0

For interpretative purposes, this scale is partitioned as follows:

2-1.33   1.33-.67   .67-0

5-3. Differences Between the Three Races on the Items of Form C: Interracial Social Dating.

Since $F_{18,\infty}(.99) = 2.0$, no differences between the profiles for the three racial groups are statistically signficant. The mean profiles are reported in Table 5-3.1. As was noted in the analysis of items 15, 17, 18, and 19 of Form A, Asians make MANY (6-10) of their friendships among Asians, FEW (1-2) among Blacks, and SOME (3-5) among Whites. Blacks and Whites both report MANY to VERY MANY friendships with members of their two races. In addition, Blacks reported making a FEW (1-2) Asian friends while Whites reported making SOME (3-5) Asian friends. This similarity across the questionnaires A and C to similar items suggests that the questionnaire items have a fair degree of concurrent validity since they are interpreted by the students in the same way.

Interracial dating is viewed rather consistently across the three racial groups. As the mean values show, the similarities in response across the three races to the items of question 24 are remarkably uniform.

Table 5-3.1. Mean Responses According to Race on the Items of Form C: Interracial Social Dating.

	Mean on Code Scale			Mean Response Choice			Univariate F-ratio	Decision
	Asians	Blacks	Whites	Asians	Blacks	Whites		
Kinds of Friends								
14a Asian	2.8	2.1	2.2	Many	Some	Some	4.5	Significant
14b Black	2.7	3.2	2.8	Many	Many	Many	3.9	Significant
14d White	3.1	3.1	3.0	Many	Many	Many	.4	N. S.
Kind of Interracial Dating Observed								
24a Asian Male and Black Female	.4	.5	.4	Never	Never	Never	.3	N. S.
24b Asian Female and Black Male	.9	.8	.9	Once in a While	Once in a While	Once in a While	.4	N. S.
24c Asian Male and White Female	1.3	1.1	1.3	Once in a While	Once in a While	Once in a While	2.7	N. S.
24d Asian Female and White Male	1.6	1.4	1.4	Often	Often	Often	2.0	N. S.
24e Black Male and White Female	1.6	1.7	1.7	Often	Often	Often	1.1	N. S.
24f Black Female and White Male	.9	1.0	1.0	Once in a While	Once in a While	Once in a While	.7	N. S.

$F_{2,\infty}(.99) = 4.61$

Graduates of all three races report that Asian males NEVER date Black females, but that Asian females date Black males ONCE IN A WHILE. Also, there is an agreement across the races in their perceptions of the dating of Asian males and White females and in the dating of Asian females and White males. Asian male-White female dating is seen ONCE IN A WHILE, while Asian female-White male datings are seen OFTEN. On the other hand, members of all three races report that Black males and White females date OFTEN while Black females and White males date ONCE IN A WHILE. Thus, while Asians and Blacks never date each other, it is seen that White males date Asian females and that Black males date White females often. Without doubt, this kind of dating would be unusual in schools consisting of students mainly of one race. In any case, the interpretation of these results is not uniformly clear. The meaning of OFTEN and ONCE IN A WHILE is left to each student to define and what is often for one student may be once in a while for another. In addition, the proportion of the students who actually participate in interracial dating cannot be surmised from these data. It could involve a great number of different pairs or it could involve a handful who are visible to the entire student body and are reported as representing a lot more than they actually represent. In any case, casual observations on the school campus made by an outsider would suggest that interracial mixing between sexes occurs with considerable frequency in specific combinations.

5-4. Differences Between the Three SES Groups on the Items of Form C: Interracial Social Dating.

The mean values of Table 5-4.1 parallel those reported in Table 3-11.1 for the Form A questions related to the making of friendships. As social class increases the number of Black friends decreases from VERY MANY to MANY, while the number of Asian friends increases from SOME to MANY and the number of White friends increases from MANY to VERY MANY. While the differences of items 24a and 24f are significant, they are not large enough to be interpreted. In any case, it is clear that the findings reported for differences across the races also hold for differences across SES groups.

5-5. Linear Discriminant Analysis of the Interracial Social Dating Questions Between the Three SES Groups.

One statistically significant discriminant function was generated from the data matrix of Form C. The coefficients that define this function are reported in Table 5-5.1. This function is a discriminator defined mainly by items 14b and 14d, the number of Black and White friends had by the graduating seniors, and therefore corresponds to the discriminant function discussed in Table 3-12.1 on different but related items. The similarity of these two functions provides a reliability check on the responses made by the two independent groups of students in how they responded to similar but different items on the two different forms. As can be seen by examining the mean values of

Table 5-4.1. Mean Responses According to the Three SES Groups on the Items of Form C: Interracial Social Dating.

	Mean on Code Scale			Mean Response Choice			Univariate	
	Low	Medium	High	Low	Medium	High	F-ratio	Decision
Kinds of Friends								
14a Asian	1.8	2.3	2.5	Some	Some	Many	8.1	Significant
14b Black	3.4	2.8	2.5	Very Many	Many	Many	15.1	Significant
14d White	2.6	3.0	3.4	Many	Many	Very Many	13.5	Significant
Kind of Interracial Dating Observed								
24a Asian Male and Black Female	.4	.6	.4	Never	Never	Never	4.0	Significant
24b Asian Female and Black Males	.8	1.0	.8	Once in a While	Once in a While	Once in a While	2.2	N. S.
24c Asian Male and White Female	1.3	1.3	1.2	Once in a While	Once in a While	Once in a While	.8	N. S.
24d Asian Female and White Male	1.4	1.4	1.4	Often	Often	Often	.4	N. S.
24e Black Male and White Female	1.7	1.7	1.7	Often	Often	Often	.2	N. S.
24f Black Female and White Male	1.0	1.1	.9	Once in a While	Once in a While	Once in a While	4.8	Significant

$F_{2,\infty}(.99) = 4.61$

Table 5-5.1. The Significant Linear Discriminant Function Between the Three SES Groups on the Interracial Social Dating Questions.

	Function
Kinds of Friends	
14a Asian	-.19
14b Black	.82
14d White	-.71
Kind of Interracial Dating Observed	
24a Asian Male and Black Female	-.47
24b Asian Female and Black Male	-.05
24c Asian Male and White Female	.22
24d Asian Female and White Male	.18
24e Black Male and White Female	-.36
24f Black Female and White Male	.29
Mean Value	50
Low SES	63.5
Medium SES	48.0
High SES	39.0
Relative Deviate Value	
Low SES	1.35
Medium SES	-.20
High SES	-1.10

the discriminating variables, the three groups of students tend to stand, on the average, about one standard deviation apart on this variable. This agrees quite well with the findings reported separately for items 14a, 14b, and 14d.

5-6. Differences Between the Two Sexes on the Items of Form C: Interracial Social Dating.

The differences between the sexes on questions 14 and 24 are not statistically significant. For completeness the mean values are reported in Table 5-6.1. Mean responses to question 14 are similar to those reported in Table 3-13.1 to questions 15, 17, 18, and 19. The responses to question 24 are similar to those reported for differences across race and SES. What can be stated for these characteristics can be said directly for the differences between the sexes.

5-7. Nested Comparisons Between the Three SES Groups Within the Sex by Race Groups on the Questions of Form C: Interracial Social Dating.

Differences between the three SES groups among the Asian graduates are not statistically significant. Since this analysis is based upon a combined sample of boys and girls, one cannot state whether or not the SES differences are significant within the sexes alone. One can use the figures reported in Table 5-3.1 for each of the Asian SES groups as representative of their average responses.

Differences between the three SES groups among the Blacks are statistically significant. The mean values for the three SES groups for these graduates are shown in Table 5-7.1. As reported for the mean responses to questions 15, 17, 18, and 19, the number of Black friends decreases as SES increases and number of White and Asian friends increases as SES increases. Concerning interracial dating it appears that the Blacks of the middle SES group report that Asian males and Black females date one another ONCE IN A WHILE. The reason for this finding is not obvious.

Differences between the three SES groups among the White males are statistically significant. The mean profiles are reported in Table 5-7.2. As the SES group of a White male increases, the number of Asian and White friends increases while the number of Black friends decreases. Thus, the low SES White male has VERY MANY (11 or more) Black friends while the high SES White male has SOME (3-5) Black friends. For some reason, middle SES White males report that Asian females and White males date each other ONCE IN A WHILE while low and high SES White males tend to select OFTEN as the response choice. The reason for this difference is not obvious.

Finally, the differences across the three social class levels within White females are significant. The mean profiles are reported in Table 5-7.3. The major part of the difference involves the number of White friends had by the girls as SES

Table 5-6.1. Mean Responses According to Sex on the Items of Form C: Interracial Social Dating.

	Mean on Code Scale		Mean Response Choice		Univariate F-ratio	Decision
	Males	Females	Males	Females		
Kinds of Friends						
14a Asian	2.3	2.2	Some	Some	.5	N. S.
14b Black	2.9	2.9	Many	Many	.0	N. S.
14d White	3.1	3.0	Many	Many	.4	N. S.
Kind of Interracial Dating Observed						
24a Asian Male and Black Female	.4	.5	Never	Never	7.0	Significant
24b Asian Female and Black Male	.8	.9	Once in a While	Once in a While	1.5	N. S.
24c Asian Male and White Female	1.2	1.3	Once in a While	Once in a While	1.2	N. S.
24d Asian Female and White Male	1.4	1.5	Often	Often	1.7	N. S.
24e Black Male and White Female	1.7	1.7	Often	Often	.1	N. S.
24f Black Female and White Male	.9	1.0	Once in a While	Once in a While	1.1	N. S.

$F_{2,\infty}(.99) = 4.61$

Table 5-7.1. Mean Responses by Blacks for the Three SES Groups on the Questions of Form C: Interracial Social Dating.

	Mean on Code Scale			Mean Response Choice			Univariate F-ratio	Decision
	Low	Medium	High	Low	Medium	High		
Kinds of Friends								
14a Asian	1.7	2.3	2.4	Some	Some	Some	3.0	N. S.
14b Black	3.8	2.8	2.7	Very Many	Many	Many	14.0	Significant
14d White	2.7	3.2	3.5	Many	Many	Very Many	5.3	Significant
Kind of Interracial Dating Observed								
24a Asian Male and Black Female	.3	.8	.4	Never	Once in a While	Never	4.8	Significant
24b Asian Female and Black Male	.8	1.1	.7	Once in a While	Once in a While	Once in a While	3.3	N. S.
24c Asian Male and White Female	1.2	1.2	1.0	Once in a While	Once in a While	Once in a While	.5	N. S.
24d Asian Female and White Male	1.3	1.4	1.4	Once in a While	Often	Often	.9	N. S.
24e Black Male and White FEmale	1.8	1.8	1.5	Often	Often	Often	2.8	N. S.
24f Black Female and White Male	1.1	1.1	.7	Once in a While	Once in a While	Once in a While	3.0	N. S.

$F_{2,\infty}(.99) = 4.61$

Table 5-7.2. Mean Responses by White Males for the Three SES Groups on the Questions of Form C: Interracial Social Dating.

	Mean on Code Scale			Mean Response Choice			Univariate F-ratio	Decision
	Low	Medium	High	Low	Medium	High		
Kinds of Friends								
14a Asian	1.8	2.2	2.4	Some	Some	Some	1.5	N. S.
14b Black	3.2	3.1	2.3	Many	Many	Some	4.1	N. S.
14d White	2.4	3.1	3.4	Some	Many	Very Many	4.3	N. S.
Kind of Interracial Dating Observed								
24a Asian Male and Black Female	.2	.4	.3	Never	Never	Never	.7	N. S.
24b Asian Female and Black Male	.7	.9	.7	Once in a While	Once in a While	Once in a While	.5	N. S.
24c Asian Male and White Female	1.2	1.1	1.3	Once in a While	Once in a While	Once in a While	.7	N. S.
24d Asian Female and White Male	1.5	.9	1.3	Often	Once in a While	Once in a While	3.8	N. S.
24e Black Male and White Female	1.7	1.7	1.7	Often	Often	Often	.2	N. S.
24f Black Female and White Male	.9	1.1	.8	Once in a While	Once in a While	Once in a While	1.9	N. S.

$F_{2,\infty}(.99) = 4.61$

Table 5-7.3. Mean Responses by White Females for the Three SES Groups on the Questions of Form C: Interracial Social Dating.

	Mean on Code Scale			Mean Response Choice			Univariate F-ratio	Decision
	Low	Medium	High	Low	Medium	High		
Kinds of Friends								
14a Asian	1.7	2.1	2.6	Some	Some	Many	4.1	N. S.
14b Black	3.2	2.6	2.7	Many	Many	Many	2.1	N. S.
14d White	2.4	2.8	3.3	Some	Many	Very Many	5.5	Significant
Kind of Interracial Dating Observed								
24a Asian Male and Black Female	.4	.7	.5	Never	Once in a While	Never	1.5	N. S.
24b Asian Female and Black Male	.9	1.1	.9	Once in a While	Once in a While	Once in a While	.6	N. S.
24c Asian Male and White Female	1.3	1.6	1.3	Once in a While	Often	Once in a While	2.5	N. S.
24d Asian Female and White Male	1.5	1.6	1.6	Often	Often	Often	.5	N. S.
24e Black Male and White Female	1.8	1.6	1.7	Often	Often	Often	1.1	N. S.
24f Black Female and White Male	1.0	1.2	1.0	Once in a While	Once in a While	Once in a While	1.0	N. S.

$F_{2,\infty}(.99) = 4.61$

increases. Girls from low SES regions report they have SOME (3-5) White friends while girls in the high SES regions report they have VERY MANY (11 or more). For the most part, the remaining mean values are very similar to the mean values for other comparisons previously discussed.

5-8. Questions of the 1966 Questionnaire that Relate to the Items of Form C.

Related questions were examined for the comparisons with questions 15, 17, 18, and 19 and for questions 14 and 16, and are therefore not repeated.

5-9. Summary for the Form C Items.

Interracial dating is viewed rather consistently across the three racial groups. The similarities in response across the three races are remarkably uniform.

Graduates of all three races report that Asian males NEVER date Black females, but that Asian females date Black males ONCE IN A WHILE. Also, there is an agreement across the races in their perceptions of the dating of Asian males and White females and in the dating of Asian females and White males. Asian male-White female dating is seen ONCE IN A WHILE, while Asian female-White male datings are seen OFTEN. On the other hand, members of all three races report that Black males and White females date OFTEN while Black females and White males date ONCE IN A WHILE. Thus, while Asians and Black never date each other, it is seen that White males date Asian females and that Black males date White females often. Without doubt, this kind of dating would be unusual in school consisting of students mainly of one race. In any case, the interpretation of these results is not uniformly clear. The meaning of OFTEN and ONCE IN A WHILE is left to each student to define and what is often for one student may be once in a while for another. In addition, the proportion of the students who actually participate in interracial dating cannot be surmised from these data. It could involve a great number of different pairs or it could involve a handful who are visible to the entire student body and are reported as representing a lot more than they actually represent. In any case, casual observations on the school campus made by an outsider would suggest that interracial mixing between sexes occurs with considerable frequency in specific combinations.

Differences between the sexes are not statistically significant.

Differences between the three SES groups among the Asian graduates are not statistically significant. Since this analysis is based upon a combined sample of boys and girls, one cannot state whether or not the SES differences are significant within the sexes alone.

Differences between the three SES groups among the

Blacks are statistically significant, F = 4.4. The number of Black friends decreases as SES increases and the number of White and Asian friends increases as SES increases. Concerning interracial dating it appears that the Blacks of the middle SES group report that Asian males and Black females date one another ONCE IN A WHILE. The reason for this finding is not obvious.

Differences between the three SES groups among the White males are statistically significant, F = 2.5. As the SES group of a White males increases, the number of Asian and White friends increases while the number of Black friends decreases. Thus, the low SES White male has VERY MANY (11 or more) Black friends while the high SES White male has SOME (3-5) Black friends. For some reason, middle SES White males report that Asian females and White males date each other ONCE IN A WHILE while low and high SES White males tend to select OFTEN as the response choice. The reason for this difference is not obvious.

Finally, the differences across the three social class levels within White females are significant, F = 2.9. The major part of the difference involves the number of White friends had by the girls as SES increases. Girls from low SES regions report that they have SOME (3-5) White friends while girls in the high SES regions report they have VERY MANY (11 or more). For the most part, the remaining mean values are very similar to the mean values for other comparisons previously discussed.

Chapter Six: Summary

6-1. History of School Desegregation in Berkeley, California.

School desegregation is the law of the land. It was elevated to this position by the United States Supreme Court in April 1954 and it has been enforced and defended by the lower courts ever since, mainly on the insistence of private citizens demanding equal and quality education for their children. Rarely has a school district moved toward an acceptance of a school desegregation program without orders and directives from the courts. One major exception to this mode is provided by the Berkeley Unified School District of California. In 1962 the School Board of this Northern City named a group of 36 individuals from education, business, social services, the church, and the lay community and asked them to make a study of the effects de facto segregation had upon the education of youth and to make specific recommendations to improve education based on the findings of their study. As expected, the lay committee found that the effects of de facto segregation were harmful to equal and quality education. As a result, a number of recommendations were made on the basis of the findings. One of the recommendations made in the report was that the junior high schools of the community should be desegregated by a redrawing of the school boundary lines. This recommendation was accepted by the School Board and in September 1964 students in the three junior high schools of the community entered desegregated eighth, ninth, and tenth grades. Near the end of the first year of the desegregation program, the principal investigator was asked by the School Board to make a survey of the student's attitudes toward the reorganization program.

A questionnaire was administered to all 7th, 8th, and 9th grade students of the school district. One of the schools, Burbank Junior High School, housed only 9th grade students. One of the junior high schools, Garfield, had both 7th and 8th grade students. Half of the 8th grade students had been 7th grade students at Burbank Junior High School during the previous year. To achieve the school desegregation objectives, these two schools had their boundary lines changed. Prior to the reorganization, Burbank was mainly Negro while Garfield was mainly Caucasian. The third school of the district, Willard, was not directly involved with the reorganization since it had already integrated. While Garfield was a 7th and 8th grade school, Willard housed a residual 9th grade class in addition to its 7th and 8th grade classes. However, after the second year it, too, like Garfield, housed only 7th and 8th grade students.

On the basis of student responses, it was noted that students seemed to react to school, teachers, counselors, and their classmates very much as they would have, at the same age, in another year. Though opinions were divided, there was a majority support for the change. Indeed, it would be difficult to attribute the attitudes expressed directly to the changes. Results for some of the more important questions are:

Item 5. How well do you like the school you are attending this year? About 60 percent of the students at Willard liked school more this year than last year. At Garfield and West Campus the corresponding percentages were about 45 and 55 percent. Since Willard was not involved in the student population shifts, and since approximately 60 percent of Willard students liked the school they were attending more than the school they attended the previous year, it must be concluded that West Campus students showed about the same level of satisfaction while students at Garfield were quite dissatisfied. One reason for the Garfield dissatisfaction was mentioned repeatedly by the students in the open end question on the questionnaire was the over crowded condition of the school which apparently placed much strain on both teachers and students.

Item 7. How hard do you think it is to get good grades this year? At Willard about 75 percent of the students thought it was harder. The corresponding percentages at Garfield and West Campus were about 75 and 65 percent, respectively.

Item 9. How do you like your teachers this year? At Willard about 50 percent liked their teachers more, while at Garfield about the same percentage of students like their teachers more. At West Campus about 60 percent liked their teachers more than the previous year. Since the percentages at West Campus and Garfield were equal to or higher than the percentage for Willard, it would suggest that the reorganization plan did not strongly affect the students' attitudes concerning their teachers.

Item 10. How do you like the counseling program in your school this year? About 60 to 65 percent of the students at each of the three schools thought that the counseling program was better than what it was the previous year. Since these percentages were about the same at all three schools, it would suggest that the reorganization plan did not strongly affect the students' attitudes toward the counseling program.

Item 13. How do you get along with your classmates this year? At all three schools about 60 percent of the students got along better with their classmates. Again, it would appear that the reorganization plan had little affect in changing students' attitudes toward getting along with one another.

Item 16. Do Negro and White studentsmix and talk to each other at your school? At all three schools more than 85 percent of the students perceived some mixing and talking between Negro and White students.

Item 17. Do White and Oriental students mix and talk to each other at your school? More than 95 percent of the students at all schools perceived some mixing and talking. Thus, it appears that almost all students perceive social integration of Orientals and Whites.

Item 18. Do Negro and Oriental students mix and talk to each other at your school? More than 75 percent of the students at all three schools perceived mixing among Oriental and Negro students.

As this brief survey of the responses indicates, attitudes across the schools with respect to the reorganization plan were quite uniform, and for the most part favorable toward the reorganization plan.

Following the second year of the program, the principal investigator was again asked to conduct a survey to determine what changes in attitude had occurred over the past school year. This survey included 7th, 8th, 9th, and 10th grade classes.

In this second report, it was noted that, generally, students' reactions to the school reorganization, as well as to teachers, counselors, and classmates were more positive than reactions the previous year. The analysis by schools showed that students' attitudes to the reorganization plan moved toward a more favorable position during the second year of the implementation of the plan with respect to their attitude the previous year. More students seemed to like both school and classmates better. A fairly large percentage, about two-thirds, reported more mixing between students of various races. An analysis of attitudes by grades and by race showed that the attitudes of White students remained positive or else improved; the same is true of Negro students, though they showed more dissatisfaction with school, teachers, and counseling programs than did Whites. But it should be emphasized that their attitudes this second year were generally more positive than the previous year. Results for some of the important questions are discussed below.

Item 19. How well do you like the school you are attending this year? At each of the four schools, more than 50 percent of the students said that they liked school better than they did the previous year. However, at Willard the total percentage was six percent below the first year figure. At Garfield, it was eight percentage points higher and at West Campus it was 12 points higher. This item by itself is of considerable interest because during the first year of the reorganization, many students at Garfield were some what dissatisfied with school, with most of the dissatisfaction centered among the 8th grade students. These students at the second testing were enrolled at West Campus and showed greater liking for school than did the students at the remaining three schools. Of secondary interest is the relatively high figure of 63 percent for the 10th grade Berkeley High students. For the most part these students were at West Campus last year, and at that time 53 percent reported that they liked school better the year before. This might reflect the greater freedom of activity, or the more interesting curriculum of high school, or it might reflect the better rapport with classmates and teachers. As one student suggested, "The student body has a more unified feeling. There is more regard for individualism."

Item 20. Do you think the work in school this year is harder or easier than last year? These percentages are almost identical to the percentages reported last year and thereby suggest that teachers' academic expectations of students have not been affected by the reorganization.

Item 22. How do you like your teachers this year? Responses to this question are apparently quite stable over time for they are almost equal to the figures reported the previous year. As previously, teachers at West Campus were liked best.

Item 23. How do you like the counseling program in your school this year? Except for the students at Willard, the reported percentages are about the same or statistically higher than the previous year. In 1965, 62 percent of the students at Willard thought that the counseling program was better. In 1966, only 53 percent thought it was better. About the same percentage is reported for Berkeley High. One student at Garfield said, "Our counselors are eager and anxious to help the students."

Item 24. How do you get along with your classmates this year? At all four schools about 65 to 70 percent of the students got along better with their classmates. This is significantly higher than the 60 percent figure of the previous year. If one of the objectives of the reorganization plan was to effect better relations among students, these figures would suggest that it has done this to some degree.

Item 25. Do Negro and White students mix and talk to each other at your school? Because of the way this questionnaire was worded, it was not possible to compare the responses of this question to the corresponding question for the previous year. Even so, there appears to be a significant amount of social mixing between White and Negro students. Approximately two-thirds of the students reported more mixing than that observed during the previous year. A student at Willard reported that he liked the "way some people are trying to make new friends," while a student at West Campus stated, "I am surprised the Ramsey Plan worked so well. I was entirely against it because I was afraid of Negroes. Now with a more open mind I have a lot of Negro friends."

Item 26. Do White and Oriental students mix and talk to each other at your school? As can be seen, thepercentages across the four schools are quite uniform. About two-thirds of the students reported that White and Oriental students mixed more than they did the previous year.

Item 27. Do Negro and Oriental students mix and talk to each other at your school? Sixty percent of the students at West Campus reported more mixing among Negro and Oriental students while at the other schools about half of the students reported more mixing.

As this brief survey suggests, students'attitudes had moved toward a more positive position during the second year than they had held during the first year of the reorganization plan. More students liked school better and more liked their classmates better. A fairly large percentage reported more mixing between students of various races.

The students who participated in the 1965 and 1966 study were seniors in 1969-1970. While they have aged, they have also developed and matured in their outlook on the social problems involved with education in an integrated school. These students are the subjects for this follow up research. The aim of the present research is to study the attitudes and feelings of these students toward school integration and to compare the analysis of their responses with the findings of the 1966 evaluation. The significance of the present study is clearly evident.

The decisions and actions made to reduce racial imbalance in the Berkeley Schools are recommendations that are certain to be proposed in the future in other American cities. Some of these recommendations have broad social significance for education in general. Some of the recommendations have to do with changing school boundaries, increased counseling services to minority groups, changes in ability groupings, etc. Modifications in any of these areas are going to produce certain repercussions throughout the community in general and attitudinal changes are going to be registered in the students' attitudes toward school integration and reorganization. This study can supply some information on the student feeling toward integrated schools in the Berkely area over an extended period of time. What is true of this community is not necessarily going to be true of any other American city, but what is known about this community concerning the attitudes of students toward school integration can be of significant utility to educators in other cities who face similar problems.

6-2. Design of the Study.

The original plan for this study could not be followed because of a number of unexpected events that occurred prior to the target date for testing the subjects. When the study was planned, it was decided to review the 1966 questionnaire. On the basis of the review, a new questionnaire containing about 50 items was to be prepared in cooperation with social studies teachers at Berkeley High School. The teachers were employed, and a discussion of the objectives was held. When these objectives were understood the principal investigator and his assistants met with the teachers for about five weeks during the months of April and May in 1970. Meetings were held two and sometimes three times per week, often extending over three continuous hours of questionnaire writing and discussion. Each question was evaluated and its meaning and value to the study and to the teachers of the school district were examined. In a short time, it became quite clear that the teachers did not think much of the original plans to ask about 50 questions which, to them, appeared to be palliative in nature and not directed to the actual experiences of the students and what the teachers perceived to be the problems and realities in the integrated school setting. At first the principal investigator tried to steer the teachers back to a simple, short questionnaire, but with the persuasiveness of their arguments and with their desire to make the results meaningful to their fellow teachers, they were allowed to win.

Because of this change in plans, it became evident that it would be impossible to ask each student to answer all questions in a forty minute social studies class period. Thus, the original testing plan had to be reformulated. In its place it was decided to write three separate questionnaires which would be somewhat nonoverlapping in their coverage of the integrated school experience.

Upon completion of the questionnaires and their printing, it was decided to test all students in their social studies classes during the second to last week of the school year. By performing the testing during this week of school, it was felt that almost all students could be tested and that sufficient time would be available to obtain information from students who happened to be absent on the test date. So as to keep absenteeism to a minimum, a number of paid advertisements were run in the Yellow Jacket, the school paper. In the ads, students were informed of the project, the date of its execution, and the importance it had for future students in the school system. In addition, they were urged to "tell it like it is."

These plans were progressing in orderly fashion when a large bomb burst in Asia that reverberated through the halls of Berkeley High School and most other educational institutions across the country. When American troops moved into Cambodia it proved to be the straw that broke the camel's back. As it was, students had already been stirred by the murders that had taken place at Kent State University in Ohio. Most students cut classes and began to demonstrate in large numbers against President Nixon's actions. Reconstitution meetings were called, seminars developed, some students took a vacation, and some students organized and worked on projects that expressed their dislike of the existing military situation. To attempt an in-school testing of all students was impossible and on the recomendation of the school principal, the project came near to being scrapped. Once the school disruptions were reduced, it was suggested by the principal investigator, or his assistants, or the teachers that the printed questionnaires be mailed to the students and that the study be revitalized. As this suggestion was examined the principal investigator, on the basis of other work performed by him, thought that the nonresponse rate among poor readers would be so exceedingly high as to make the study useless. Since it was known that the poor readers would tend to be Black, obvious biases in responses were evident. However, it was felt that, because a lot of work and money had gone into the preparation of the questionnaire, something would be gained by trying a mail survey.

The Berkeley Unified School District supplied IBM type mailing address labels for all students in the graduating class. Envelopes were prepared, names were coded to keep track of respondents and nonrespondents, and the first wave of questionnaires were sent out to the students on June 22, 1970. Follow up letters were mailed to nonrespondents on July 8, 1970 and July 31, 1970. With each follow up letter another questionnaire was sent to the student in case the originally mailed questionnaire had become lost or misplaced. Since three different questionnaires had been prepared, questionnaire forms were assigned in alphabetical order. Form A went to the first student on the alphabetical school roster. Form B went to the second listed student, with Form C going to the third listed students. The process was then repeated for students four, five, and six, on the roster, and the process was then repeated across each group of three consecutive names. One major exception to this assignment rule was made for the Asian students. Since it was known that the school contained approximately 10 percent students with Asian surnames, it was decided to send all of these Form A only. Thus, as their name appeared on the roster, they were sent Form A and the student directly after them on the list was sent the questionnaire that normally would have gone to them. Among the January graduates the response rate is given by $p = 115/289 = .40$. Among the males, the response rate equals $p_M = 38/117 = .32$, while among the females the corresponding figure is given by $p_F = 77/172 = .45$. Neither response rate is very high. From the telephone follow-up it appears that many of the graduates were no longer in Berkeley and that a fair percentage of the males had been drafted into, or had joined, the armed forces.

Response rates among the June graduates are slightly, but not significantly, higher than for the January graduates. The overall response rate is given by $p = 455/815 = .56$, with the mail response rate given by $p_M = 238/450 = .53$ and the female response rate given by $p_F = 217/365 = .59$. Information on race was available for the June graduates. The response rates for the Asians, Blacks, and Whites are given respectively by $p_A = 74/95 = .78$, $p_B = 149/338 = .44$, and $p_W = 232/382 = .61$. The group with the lowest response rates consists of the Black males. For them, $p_{BM} = 72/174 = .42$. The group with the highest response rate consists of the Asian females. For them, $p_{AF} = 36/45 = .80$.

When interpreting the reported statistics, the biases entailed in nonresponse must be considered. For Asians, the bias is most likely minimal and so their responses can be accepted at face value. Among the Blacks and Whites, and especially among the Blacks, some accomodations in interpretations are required. Since the responses are quite favorable toward the integration program, it is easy to assume that the nonrespondents tended to dislike their training in the integrated school. Unfortunately, the individual who makes such an assumption has little to defend his position except that it is his opinion. The same is true for an individual who assumes the opposite. Not even this position is entirely defensible. The authors tend to believe that the poor response rate is not an indication of dislike of the school system and its integration but, rather, a lack of interest in completing the long questionnaire received through the mail. Many students who took the time to respond thought that the information was of no real interest to the school administration or that the questionnaire was biased and of no value. Also, it must be noted that many students, especailly Black males, are functionally nonreaders. Many cannot read beyond a sixth grade reading level and many more refuse to read even if they can. Certainly these two factors contribute to the high nonresponse rate for them. Finally, it is quite clear that a large number of students departed from Berkeley immediately after graduation; this was especially true of the high SES Whites. A remarkable number of them were reported by family over the telephone to be traveling in Europe and a surprising number were reported as entering the armed forces. Thus, it is the author's belief that the high level of nonresponse is not indicative of dislike of the integration program but of nonavailability of students and the general lack of interest in reading, completing, and mailing back of a questionnaire to an inquisitive professor doing research and not having genuine interest in students' feeling and attitudes.

Since the response rates were expected to be quite low, it was further decided to send extra questionnaires to graduates who returned their first mailed questionnaire. For example, if a student who received Form B returned the completed questionnaire, he was sent the next form in the series, Form C, and was asked to complete and return it. If he did this, he was then sent Form A and was asked to complete it and return it. Many of the graduates did this.

6-3. Statistical Procedures.

Thirty-four questions were identified on Form A as being similar to, related to, or identical to items of the 1966 questionnaire. Twelve questions were identified on Form B, and three questions were identified on Form C for investigation. The Form A items were submitted to a principal component analysis. Ten components were identified with Eigen values exceeding one in value. These ten components explained 69.6 percent of the total variance. They were then submitted to a varimax factor rotation and grouped into four sets of factors. Each set was submitted to a multivariate analysis of variance across race, sex, and socio-economic status. Nested comparisons were made across race and sex within the three levels of SES. Any multivariate F ratio exceeding the $\alpha = .01$ significance level was submitted to a post hoc investigation using the Roy simultaneous confidence interval method. Any significant linear discriminant function was then submitted to a Scheffé type post hoc comparison to identify various sources of significant differences. The questions of Forms B and C were analyzed in exactly the same manner, except that no principal component analysis was performed on the data prior to the multivariate investigation.

6-4. The Four General Factors of Form A.

As a result of the principal component analysis and varimax rotation on the correlation matrix, all 34 items but one were combined into a meaningful fashion into ten different interpretable factors. Item 40, on how well the students liked attending Berkeley High School, did not appear in any of the ten factors. Factors One, Two, and Three relate to the making of new friends and acquaintances in the integrated setting. These factors measure one of the goals of any school integration plan in which one objective is to get people of different races together on mutual interests and goals in life and the acceptance of one another on dimensions other than skin color. Factors Four, Five, and Six relate to an undesireable effect of school integration frequently mentioned by parents as one of the reasons that they are against school integration. These undesireable elements concern the amount of interracial fighting and quarrelling that goes on between students of different races. Factor Seven relates to the previous six factors in that it might be hypothesized that students who make many friends among students of different races would approve of education in the integrated setting whereas students involved with aggressive shakedowns, quarrels, and other friction-producing activites would prefer education in a racially segregated school. In a certain sense, Factors Eight, Nine, and Ten relate to the other factors of the set since the perceptions of other students' activities can be clouded by ones own behavior. Students mixing with many friends among the various races might well see others doing the same whereas students with no friends outside of their own race might well perceive that social mixing and talking in an informal situation has not occurred mainly because it has not occurred for themselves.

Since these factors appear to be well defined by the large factor loadings, it makes sense to give them working names. As already indicated, Factors One, Two, and Three will be referred to as a Friendship Factor. Factors Four, Five, and Six will be called an Aggressive Act Factor. Factor Seven will be called Attendance at a Mainly One Race School. Finally, Factors Eight, Nine, and Ten will be termed Perceptions of Interracial Social Mixing.

6-5. The Friendship Factor of Form A.

Differences between the three races on the friendship items are significant, F = 25.6. Asians reported large numbers of friendships with other Asians during their integrated junior and senior high school years. On the average, new friendships with Blacks were substantial but not excessively large in number. In general, they made some new Black friends in junior high school and many new Black friends in senior high school. They made one close Black friend and many acquaintances among Black classmates. Asians made more new friends among White students than they did among Black students. Generally, they reported making many new White friends in both junior and senior high school. They made about two close White friends and very many acquaintances among White classmates. Since Asians made many friends across races, it would have to be concluded that Asians have integrated.

Black students did not integrate to the same degree as Asians. In both junior and senior high school they report that they made very many friends and acquaintances who are also Black. They made three or more close Black friends and very many Black acquaintances. Concerning cross-racial friendships with Asians and Whites, Blacks report that they made a few Asian and some White new friends in junior high school. In senior high school they made some Asian and some White friends. They made some Asian and some White acquaintances and one close Asian and one close White friend. Thus, for Blacks, school integration does not necessarily promote as many close interracial friendships on the part of Black students though their numbers are not minimal.

Friendships patterns for Whites are quite similar to those reported by Asians. During the junior high school years Whites made very many new friends who are White like themselves. During their senior high school years they continued to make very many new White friends. At the same time they reported making very many White acquaintances during their entire school years. In their junior high school years they made some Asian friends and during their senior high school years they made many Asian friends. They reported having made many friendships and acquaintances with Asians and made one close Asian friend. When it comes to making friends with Black students, Whites report that during their junior and senior high school years they made friends with many Blacks. They also report making many Black acquaintances during their entire school career and have about one close Black friend. Thus, even for Whites, school integration does not entail large numbers of close interracial friendships. In any case, it must be concluded that friendships did develop across the differences in skin color.

As suggested by the responses given by students who have spent six years in an integrated school, it would appear that school integration does not foster the making of many close interracial friendships. Students tended to make many new friends and acquaintances among students whose race was identical to their own. Where friendships developed across races, they were seen to be few in number, as reported by the respondents to the questionnaires. Since a person can only have a few close friends, this is not surprising. In addition, that close cross-racial friendships did not develop in great numbers within the integrated school is not too surprising when the nature of the Berkeley student body is examined. For the most part, the White students come from the high SES hill portions of the school district. Their parents tend to be white collar workers and highly professional or managerial. Their life style corresponds to the kind found in the homes of professors, lawyers, doctors, executives, and other similarly trained workers. The Blacks, on the other hand, live in the low SES flatland census tracts of the city. For the most part, their fathers tend to be blue collar workers, though Black professionals and white collar workers are also found in their midst. Finally, the Asians are fairly well-distributed throughout the community, but for the most part represent upper lower to lower upper social class life styles and aspirations. They have always placed a high value on education and their children respond to this value in many subtle ways. This may tend to reduce their interacting and developing many close friendships across race. The three groups have very different life styles and aspirations; they differ widely in what the individual members expect of education. While they may attend the same schools, the differences between them are still large enough to keep them separate.

Finally, it should be noted that when two White students report that they have one close Black friend, it could be that each is reporting about the same individual. The way the questions were asked one cannot determine whether many or just a few students were accepted across races. Since friendships are based on common needs, interests, goals, and desires it could be that social integration of a friendship nature involves only a small group of students. While the data does not support this argument, it is true nonetheless, that it might if different questions were asked or if a social distance inquiry were to have been made. In any case, the interpretations, while plausible, deserve some further study. As one student reported, the making of friendships between and within races "depends on who they are."

Similar analyses were performed across social classes. Since social class is highly correlated with race in the community, findings for race can be extended directly to social class as defined by the 1960 census data for Berkeley. Since the definition for low, medium, and high SES as used in this report are peculiar to Berkeley, no further comments are provided.

When comparisons were made across sex, no statistically significant findings were noted. Finally, the comparisons between 1966 and 1970 responses to similar questions were essentially the same.

6-6. The Aggressive Act Factor of Form A.

Differences between the races on the aggressive act questions are statistically significant, F = 5.8. All other differences are non-significant.

Shaking downs and ripping-offs did not occur too often, but were definite experiences in the school as reported by Asians and Whites in their junior high school years. Aggressive acts involving an Asian or White student occur every two or three academic days.

In some respects, many parents and students might argue that an average of one extortion encounter per student over three years is too much, and with that argument one could find few dissenters. In any case, it is clear that not many specific students were necessarily singled out for repeated threats since students who reported that they were victimized invariably stated that it only happened once or twice. Very few students were repeatedly taken advantage of in this way.

Whereas threats upon the Asian student appeared to decline during the senior high school years, the same is not true for the White student who still reported an average of one violent encounter with Blacks during their senior high school years. Again, while these figures are low, in many respects they are higher than might be desired or expected in a school in a White middle class neighborhood.

During the junior high school years Blacks and Whites reported that they averaged one or two fights, quarrels, or arguments with other Blacks and Whites. Blacks report that aggressive encounters were had with other Blacks as well as with Whites. On the other hand, Whites report that their disagreements involved mainly Black students with almost no aggressive interactions with other White classmates. During the senior high school years these kinds of aggressive encounters declined in frequency. It could be that students began to relate to one another on a more friendly basis, or it could be that the two groups became more separated because of the Black power and Black identity movement. It might also be reasoned that the Black students who created most of the disturbances during the junior high school years had dropped out of school and were no longer around during the senior high school years. These and other explanations could be offered but at best they are speculation. Other data, not available at this time, are needed to better understand what actually happened over the six year school period covered by these questions. However, it is safe to conclude that the reported encounters of violence between students were primarily instigated by Black students, being for the most part Asian-Black, White-Black, and Black against Black.

6-7. Attendance at a Mainly One Race School Factor of Form A.

Differences between the races on how well they like a racially segregated school are statistically significant, F = 18.1. Asians report that they would not enjoy very well attending a school that was mainly Asian, Black, or White. The same statement applies to White students. However, Blacks report that they would enjoy attending a school that was mainly Black. For them the typical response is that they would like it well. This preference on the part of Blacks could reflect the growing Black power and separatist movement among Blacks for separate schools and separate school programs. Unfortunately, no data is available to defend or disprove this point and so a clear explanation for this racial difference is not available.

Differences in responses between students in the three different SES sections of the community are statistically significant, F = 4.3. The major source of the significance can be attributed to the way students in the low SES group respond to attending a school that is mainly Black. For these students the typical response choice is well. Since the students in these SES regions are mainly Black, this outcome is not surprising as it is in direct agreement with the findings reported for the differences between the races on these three items.

While the differences between the sexes are statistically significant, they are not large enough to be interpreted in a meaningful manner.

6-8. The Perceived Social Mixing Factor of Form A.

The mean profiels between the three racial groups are statistically different from one another, F = 3.1. Interracial mixing appears to have increased from the junior to the senior high school years. During the junior high school years, students of the three different races reported that Asians and Blacks mixed and talked to each other not very often. However, in the senior high school years these same students reported that Asians and Blacks could be seen together often. In the junior high school years Asians and Whites were seen to mix often by all three races of students, but in the senior high school years Asians and Whites reported that they mixed in social situations very often. In junior high school years Blacks and Whites were reported as mixing not very often by members of the three racial groups, but during the senior high school years Blacks and Whites were seen mixing often by all three racial groups. As these statistics suggest, students of different races mix socially with one another in the school environment and as suggested these social interchanges lead to a few close friendships or to the development of many acquaintances. It should be noted that the increase in racial mixing during the senior high school years corresponds with the reduction of violence. Since one of the objectives of school integration is to bring students of different races together, there is some evidence that this occurred at Berkeley High School during the integration period under study.

Differences between the three SES groups are statistically significant, F = 4.0. Students in the low SES areas saw Blacks and Whites as mixing often during their junior high school years while the students in the medium and high SES areas reported such mixing as happening not very often.

Differences between the sexes are not statistically significant.

6-9. Items of Form B: Classroom Work Attitudes.

Of the more than 150 items contained on Form B, nine are directly related to those asked of the students in the 1966 questionnaire given when the students were eighth graders and had completed a second year of the integration program. Because of the manner in which these items were stated, no factor analysis was performed on the set of responses.

Differences between the races are significant for classes whose composition is mainly Black or mainly White, with F = 4.0 for both groups. Differences are not significant for the racially mixed classes. While Blacks report that they like mainly Black classes very well, Asians and Whites report that they like them fairly well. It is worth noting that the average value of 2.6 for Asian students is quite close to the response choice not very well. On the average, students of all three races agree that class assignments are moderately easy in mainly Black classes. However, Blacks report that teachers expect quite a lot while Asians and Whites report that teachers expect only a little in classes that are mainly Black. Whether or not teachers expect more of Black students in these classes is questionable. That Black students perceive this as part of the mainly Black classroom is apparent, but they also report that teachers in racially mixed and mainly White classes expect quite a lot of work from their students.

In the racially mixed classes, Black students report that they like the racially mixed classes very well, while Asians and Whites report that they like these classes fairly well. Asians and Blacks report that class assignments are moderately difficult while Whites think they are moderately easy. However, all three groups think teachers expect quite a lot. In the mainly White classes, Asians and Whites report that they like their classes fiarly well, while Blacks report that they like their mainly White classes not very well. On the other hand, all three groups of students report that class assignments are moderately difficult and that teachers expect quite a lot.

It is apparent that most students prefer racially mixed classes over mainly Black or mainly White classes. Students think that teachers give moderately difficult to moderately easy classignments in mixed classes and they expect the students to work for their grades. In the mainly White classes, teachers give moderately difficult class assignments. In addition, Black do not seem to like these classes very well. Asians do not enjoy their mainly Black classes and all students placed in these classes think they are not too difficult. This also applies to the Blacks, but these students report that teachers expect quite a lot of them.

Differences between the sexes are significant for the racially mixed classes only, F = 4.7. In these classes, boys report that they like their classes fairly well while girls report that they like their classes very well. On the other hand, both boys and girls report that the work assignments are moderately easy and that teachers expect quite a lot of work from the students in racially mixed classes. These findings appear to be inconsistent and perhaps indicate that teachers give many assignments that are not very challenging. In the mainly Black classes, assignments are thought to be moderately easy by both boys and girls and in the mainly White classes, they both agree that class work required is quite a lot. Thus, both boys and girls report that class assignments increase in difficulty as the proportion of

White students increases.

6-10. Items of Form C: Interracial Social Dating.

Of the more than 150 items contained on Form C, nine are directly related to those asked of the students in the 1966 questionnaire. Since the number of items to be analyzed is small, no attempt was made to group or cluster them. Interracial dating is viewed rather consistently across the three racial groups. The similarities in response across the three races are remarkably uniform.

Graduates of all three races report that Asian males never date Black females, but that Asian females date Black males once in a while. Also, there is an agreement across the races in their perceptions of the dating of Asian males and White females and in the dating of Asian females and White males. Asian male-White female dating is seen once in a while, while Asian female, White male datings are seen often. On the other hand, members of all three races report that Black males and White females date often while Black females and White males date once in a while. Thus, while Asians and Blacks never date each other, it is seen that White males date Asian females and that Black males date White females often. Without doubt, this kind of dating would be unusual in schools consisting of students mainly of one race. In any case, the interpretation of these results is not uniformly clear. The meaning of often and once in a while is left to each student to define and what is often for one student may be once in a while for another. In addition, the proportion of the students who actually participate in interracial dating cannot be surmised from these data. It could involve a great number of different pairs or it could involve a handful who are visible to the entire student body and are reported as representing a lot more than they actually represent. In any case, casual observations on the school campus made by an outsider would suggest that interracial mixing between sexes occurs with considerable frequency in specific combinations.

Differences between the sexes are not statistically significant.

Differences between the three SES groups among the Asian graduates are not statistically significant. Since this analysis is based upon a combined sample of boys and girls, one cannot state whether or not the SES differences are significant within the sexes alone.

Differences between the three SES groups among the Blacks are statistically significant, F = 4.4. The number of Black friends decreases as SES increases and the number of White and Asian friends increases as SES increases. Concerning interracial dating it appears that the blacks of the middle SES group report that Asian males and black females date one another once in a while. The reason for this finding is not obvious.

Differences between the three SES groups among the White males are statistically significant, F = 2.5. As the SES group of a White male increases, the number of Asian and White friends increases while the number of Black friends decreases. Thus, the low SES White male has very many (11 or more) Black friends while the high SES White male has some (3-5) Black friends. For some reason, middle SES White males report that ASian females and White males date each other once in a while while low and high SES White males tend to select often as the response choice. The reason for this difference is not obvious.

Finally, the differences across the three social class levels within White females are significant, F = 2.9. The major part of the difference involves the number of White friends had by the girls as SES increases. Girls from low SES regions report that they have some (3-5) White friends while girls from the high SES regions report they have very many (11 or more). For the most part, the remaining mean values are very similar to the mean values for other comparisons previously discussed.

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STUDENT DEMONSTRATIONS IN A MULTI-RACIAL HIGH SCHOOL: THE CASE OF BERKELEY

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Introduction.

Student activism on college campuses appeared to reach near epidemic proportions across the nation during the late 1960's. The causes and effects of demonstrations brought about by a small number of student protestors have been studied and discussed by many investigators. Leading the list is the President's Commission on Campus Unrest which was appointed in the wake of the shooting incidents on the Kent State and Jackson State campuses in May 1970(13). The Commission was headed by former Pennsylvania Governor William W. Scranton and its report (officially Campus Unrest) was labeled the "Scranton Report" by the popular press.

The Commission concluded that:

> ...the root causes for what we call campus unrest are exceedingly complex, are deeply planted in basic social and philosophic movements, and are not only nationwide but also worldwide.

Furthermore, it was argued in the Report that a "shift in student culture is a basic--perhaps the basic--contributing cause of campus unrest." This fundamental "shift in student culture" has resulted in the formation of a:

> ...new youth culture [which] itself is not a 'problem' to which there is a 'solution'; it is a mass social condition, a shift in basic cultural viewpoint.

Unfortunately, the President repudiated the Commission's conclusions even before its study was released to the general public for consideration.

The Commission's report traced the beginnings of contemporary student unrest to the 1964 Free Speech Movement on the Berkeley campus of the University of Californa and labeled that series of disruptions and similar movements across the nation "the Berkeley invention." Yet the Free Speech Movement did not arise in a vacuum. A series of confrontations dating from the late 1950's, including demonstrations against the House Un-American Activities Committee hearings in San Francisco and against alleged unfair hiring practices of Bay Area employers, attest to the tenacious and pervasive nature of the local "unrest." The Berkeley-Oakland Area, with a Black population of about 150,000, more or less concentrated in a ghetto, has been spared a major disturbance similar to those which took place in other cities during the 1960's. While this may indicate a certain stability, against it must be balanced the fact that Berkeley has housed the national headquarters of the Black Panther Party since its founding in Oakland in 1966. Indeed, many of the social and political tactics of that Party from free breakfasts for school children to shoot-outs with police have been tested locally. Given the regional history of protest and the news media's avid attention to the attendant demonstrations, the protest spirit has had ample opportunity to permeate all sectors of society.

Student Unrest in Secondary Schools.

While activism among college students has been given wide and prominent coverage by the press and television, it is not generally known that student activism is also a part of the junior high school and secondary school scene in many communities across the country(3,7,9). A nationwide survey conducted in 1969 by the National Association of Secondary School Principals covering six percent of the nations secondary schools (one in fifteen) revealed that more than half the junior and senior high schools have experienced some form of student protest or demonstration(8). A study

by the Office of Education has reported similar activity(1).

Given the recent history of activism and protest in the San Francisco Bay Area and the rising level of student protest in secondary schools it is of interest to study some of the parameters associated with student protest at Berkeley High School, an integrated three-year secondary school located in the shadow of the university campus which spawned the so-called "Berkeley invention."

The Case of Berkeley High School.

As might be expected, Berkeley High School, because of its location in the San Francisco Bay Area, its proximity to the University of California campus, and the general situation in an area which has become a mecca for hippies, transients, and other alienated types, has been the scene of many student demonstrations and classroom disruptions. In fact, over the latter years of the past decade, normal classroom routines and activities have been interrupted by students involved with such topical protests as the Third World Movement, the ecology movement, the Vietnam Day moratorium, the Black Power movement, Women's Liberation, the Grape Boycott in support of unionizing grape pickers, and most recently, the Anti-Cambodian Invasion movement. This last movement so disrupted normal school activities that the administration of Berkeley High School was forced to dismiss classes for several days.

In many ways Berkeley High School is strongly influenced by the University of California which dominates the social, political, and economic life of the City of Berkeley. Physically, the High School is located a scant two city blocks from the western edge of the University campus. The University, because of its setting and payroll, has contributed to the division of the city along racial and economic lines. Areas bordering the University in the Berkeley Hills have a concentration of bright White students whose parents teach or work at the University, are in the professions, or in management positions. Below the hills resides a non-White population that represents almost one-third of the City's total population. For the most part, this population lives in the flat area that extends from San Francisco Bay to the base of the hills and from the sourthern city border to the vicinity of the University campus. North of the campus non-Whites thin out and are gradually replaced by Whites.

In addition to the stable population, as if to compiicate matters, the University and high school campuses are surrounded by a large student population which reflects the University undergraduate-graduate student ratio of approximately 18,000 and 10,000 respectively, and a floating population of non-students estimated at about 3,000. The undergraduate student body at the University is drawn from the top eighth of California's high school graduates plus a large number of very talented out-of-state students. The activist persuasion of a segment of these University students has been described and interpreted by Feuer(6) and in Lipset and Wolin(10).

The non-student population is articulate and activist and in the past has participated in University demonstrations and protests with enthusiasm. It has been described by Whittaker and Watts(15):

> ...as being alienated from conventional values; it is a protest against society...; it is a reaction against the dehumanizing influences of modern institutions and a materialistic way of life; it is critical of social hypocrisies and restricted standards; politically, it tends from the independent liberal to the radical left, as well as harboring the politically withdrawn; it is pro-civil rights and pacifistic; in respect to sexual behavior, drug usage, and public conduct and appearance, it is a libertarian society; it appears to be intellectually sophisticated and culturally aware...

Consonant with their level of cultural sophistication is the fact that a large proportion (almost two-thirds) of these non-students are college dropouts. The non-student population of Berkeley also tends to be young with about half of the females and a third of the males aged 20 or younger.

The racial composition of Berkeley is reflected in the student body of Berkeley High School (grades 10, 11, and 12) where, according to the 1970-71 school census, 42.7 percent of the students were reported as White, 44.7 percent as Black, and 12.6 percent as "other," which is mainly students of Japanese and Chinese origin or with Spanish (Mexican-American) surnames(2). In 1960 the racial distribution at Berkeley High School was 61 percent White, 29 percent Black, and 10 percent "other non-Caucasian." Although the issue is not yet decided, schools in the City of Berkeley appear to be in what Weinberg has described as a state of transition from essentially White to predominantly Black(14), a condition which was noted by Coleman(4) in 1966. Because of this diverse composition and closeness to the University of California, the student population of Berkeley High School is quite heterogeneous and fragmented both racially and socioeconomically. Concomitantly, the Berkeley High School student body contains a wide range of ability, aspiration, and opinion.[1]

Source of Data.

Berkeley integrated (really desegregated) its three junior high schools in 1965. One year later the first cohort of integrated students was surveyed in order to determine student attitudes toward school integration. In the Spring of 1970, when the first cohort of integrated students were ready to graduate from high school, another survey was made in order to learn what changes in attitudes toward integration had occurred during their six years of integrated experience. The data upon which this report is based was collected as a part of that more comprehensive study.

A series of items having to do with such timely topics as protests, law and order, and the war in Vietnam were added to one of the forms of the questionnaire and the results are reported below. In addition to the above topics information was obtained on sex, race, parent's education, attendance at religious services, and political party preference of both students and parents. The school district provided standard scores as measures of ability and achievement.

The instrument for the larger study was to be given in the first week of June 1970 just prior to graduation. The events of May following the Cambodian Invasion and the Kent and Jackson State shootings were causes for protest and demonstration in

Berkeley. The generally unsettled situation along with the usual rites of spring and the rituals of approaching graduation argued against the original plan to administer the instrument to students in an assembly or "home room" period. Teachers who had acted as consultants in the drafting of items advised against any mass testing on grounds that attendance would be poor. The only option left was to mail questionnaires to the students' address as available on school records. The original pool of items was divided into three forms and these were mailed during the second week in June 1970.

Results.

The basic statistics of this report are shown in Tables One and Two. These statistics are derived from the responses of 293 graduated seniors from Berkeley High School to the following set of questions.

-----Insert Tables One and Two about here-----

What is your sex? MALE FEMALE

Which of the following best describes you?

ASIAN BLACK CHICANO WHITE OTHER (Specify)__________

What part have YOU taken in the following student protests:

a. Third World Movement?	NONE	INTERESTED BYSTANDER	AN ACTIVE PART	I OPPOSED IT
b. Vietnam Day Moratorium?	NONE	INTERESTED BYSTANDER	AN ACTIVE PART	I OPPOSED IT
c. Ecology movement?	NONE	INTERESTED BYSTANDER	AN ACTIVE PART	I OPPOSED IT
d. Anti-Cambodian war movement?	NONE	INTERESTED BYSTANDER	AN ACTIVE PART	I OPPOSED IT
e. Black Power Movement?	NONE	INTERESTED BYSTANDER	AN ACTIVE PART	I OPPOSED IT

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[1] A demographic and ability description of Berkeley's junior high schools in 1965 can be found in Coleman(4). At the time of the Coleman study Berkeley had just completed the integration of its three junior high schools and the cohort studied in this paper was entering seventh grade. DuPree(5) gives a journalist's account of Berkeley High School in early 1971.

f. Grape Boycott? NONE INTERESTED BYSTANDER AN ACTIVE PART I OPPOSED IT

g. Other (Specify) ________________________

For the main analysis of the latter question, each answer was dichotomized into either (1) having taken an active part in the named protests, or (0) for all other responses. No one responded to part "g."

In addition, IQ scores based on a Fall 1969 administration of the Lorge-Thorndike IQ test were obtained from school records. The scores, a composite of verbal and non-verbal components, were grouped into the following five intervals: 83 or lower, 84-100, 101-116, 117-132, and 133 or higher. For the data reported in Tables One and Two, sex, race, and IQ group are independent variables, while the number of protests actively participated in serves as the dependent variable. Since there were very few "Chicano" or "other" respondents they were not used in the analysis. For the several cases where IQ was not available, means were determined for sex/race/socio-economic-status groups and substitute IQ scores were then estimated using a table of Random Normal Numbers with $\mu = 0$, and $\sigma = 1$.

As shown in Table One, sex does not differentiate between the amount of protest participation admitted to by the students. However, among males and among females, or within sex, race does make a difference. The F-ratios for the difference between the races for males and females, respectively, are given by $F = 15.20$ an $dF = 7.27$. Both are significant at $\alpha = .01$, since $F_{2,270}(.99) = 4.79$. Of the total variability as measured by the squared point biserial correlation coefficient or a biased form of Hays' (1964) measures of explained variance, race accounts for

almost 13 percent of the total variability since:

$$\hat{\rho}^2_{race} = \hat{\omega}^2_{race} = \frac{SS_{race\ in\ males}}{SS_{total}} + \frac{SS_{race\ in\ females}}{SS_{total}}$$

$$= \frac{70.54}{816.71} + \frac{33.76}{816.71} = .127$$

As shown by Marascuilo and Timm(12), this represents a source of variance of modest proportions.

Among the males, the mean number of reported protests participated in is given by .5, 1.1, and 2.3 for Asian, Black, and White males. Among the females, the corresponding averages are .8, 1.3, and 2.1. These averages suggest that Asian-American students do not often become involved in protests, while Black high school students are moderate in their protest participation, and White students of both sexes tend to be the most active participants in student demonstrations at the high school level.

If race and sex are ignored, it is seen that IQ is also related to student participation in protests. For the five IQ groups, the between groups $F = 10.01$. This represents a statistically significant source of variance since at $\alpha = .01$, $F_{4,270}(.99) = 3.48$. For the specific intelligence levels:

$$\hat{\rho}^2_{IQ} = \hat{\omega}^2_{IQ} = \frac{SS_{IQ}}{SS_{total}} = \frac{92.96}{816.71} = .114$$

which indicates that IQ accounts for about 11 percent of the total variance.

For the five IQ groups the mean number of protests is given by 1.3, 1.0, 1.4, 2.0, and 2.7. For these data, the F-ratio for linear trend is given by $F = 21.76$ which is significant at $\alpha = .01$. This suggests that the amount of high school student protest participation increases with IQ. Except for Asian males and Black females, this same general pattern appears for the remaining race by sex combinations. The F-ratios are significant for male Black, male Whites, and female Asians, but not for male Asians, female Blacks, and female Whites. The lack of significance for female Whites could have resulted from the small slope in the regression line because, as inspection of the sample means suggests, involvement tends to increase with IQ even for them.

Similar analyses were performed upon school achievement measures as well as upon verbal and non-verbal IQ score components of the composit IQ reported above, but since the results are so close to those reported for the IQ measures, they will only be mentioned here. In these analyses, Iowa Tests of Educational Development for Quantitative Thinking and Standardized Reading were substituted for IQ.

A number of other variables which one would expect to relate to student activism in high school were also tested. Results yielded by some of these variables are shown in Tables Three and Four. These analyses are based upon the questions:

-----Insert Tables Three and Four about here-----

How often do you attend religious services?

NEVER SOMETIMES OFTEN REGULARLY

Which political party is liked most by:

Your Father? (Specify) ______________
Your Mother? (Specify) ______________
Yourself? (Specify) ______________

What is the effect of student protest movements that are non-violent?

THEY DO HARM
THEY DO NEITHER HARM NOR GOOD
THEY DO GOOD

What is the effect of student protest movements that are violent?

THEY DO HARM
THEY DO NEITHER HARM NOR GOOD
THEY DO GOOD

Finally, social class was determined by asking the students to indicate the census tract in which they resided on a map printed on the cover of each questionnaire. Based on a factor analysis performed upon the 1960 census tract data by Marascuilo and Penfield(11) the 28 census tracts of Berkeley were divided into low, medium, and high socio-economic strata.

Political party preference of the students themselves is strongly related to degree of participation, with F = 14.99 and $\hat{\omega}^2$ = 16.7 percent. As might be predicted, students who preferred the political philosophy of the Republican Party state that they did not actively participate in demonstrations. For them, the mean number of demonstrations was .4, whereas students who prefer the Democratic or Peace and Freedom Parties report active participation in demonstrations with means of 1.5 and 2.9 respectively. Clearly, the most active students show allegience to the political party which is reported to be most active in tis demands for political, social, and economic change.

It was possible to make a check on response bias by combining the respondent's mother's and father's political party preferences and comparing them with voter registrations in the City of Berkeley for the November 1970 Congressional election.

It will be seen in Table Five that there is very little difference

-----Insert Table Five About Here-----

between reported parental political party preference and officially recorded voter registrations.

As can be seen, religious attendance is clearly associated with participation in student demonstrations with $F = 12.54$ and $\hat{\omega}^2 = 11.5$ percent. Students who report that they never go to church average 2.2 demonstrations while those who go to church on a regular basis average .8 demonstrations.

While the differences across socio-economic strata are statistically significant with $F = 5.93$ and $\hat{\omega}^2 = 4.0$ percent, the differences are not large even though they show a monotonic relationship with one another. Students from the low SES census tracts participated in 1.2 demonstrations, those in medium SES census tracts participated in 1.8 demonstrations, while those in the high SES tracts participated in 2.0 demonstrations.

Finally, it is seen that student participation has some slight association with the way students view the outcomes of protest. If they think the outcome is harmful, they have a tendency not to protest, whereas if the outcome is seen as beneficial, then the desire to protest increases. But since the correlations as measured by omega square are relatively low for these variables, the fact that the findings are statistically significant must be viewed with some dispassion.

Discussion and Summary.

Student activism in the secondary schools takes many forms and is supported or challenged on many fronts. According to reports and studies conducted in 1969, three out of five school principals responding to a survey questionnaire sent to one in every fifteen high schools in the United States reported some form of protest in their school. Eighty-two percent reported that school regulations were questioned, 45 percent reported that curriculum and instruction policies and programs were open to attack, and 25 percent reported that student activism focussed on social issues of national and international significance.

In the city of Berkeley, a city which witnessed college student protest movements throughout the 1960's, protest in the high school tended to mirror protest on the larger, more volatile, University campus. As a result, part of the uniqueness of Berkeley High School demonstrations is their nonemphasization on changing school rules and curriculums. In some respects, the Berkeley administration is ahead of most school districts in the minimization or elimination of dress codes and in the adoption of special programs thought to be relevant to education in a contemporary society. According to an article in the Wall Street Journal by Black journalist David DuPree, "...Berkeley High is a place where students most emphatically do their own thing...Berkeley High...represent[s] an extreme example of the kind of 'open' high school that some influential educators see as part of the wave of the future...There is no dress code at Berkeley High...Students often wear hats in class...Identification cards and hall passes, once mandatory have disappeared...300 students [attend the] community high school where students direct the curriculum...[Black students attend] another subschool, off campus, 'black house,' specializing in black studies and closed to white students"(5). As these comments suggest, the administration has created a permissive school environment. Long hair, beards, sideburns, naturals, sandals, beads, flamboyant and Bohemian dress are not discouraged and, indeed, seem to be the rule. Even the selection of classes, teachers, and time periods are left to the individual students. Classes can range from college calculus and Black studies to the traditional high school classes in typing, shorthand, shop, English, geometry, etc. With such individual freedoms already available, it is not surprising that demonstrations and student protests have focussed on problems of the current national and international scene.

Berkeley is also unique in that its student body is overpopulated with bright youngsters. About 80 percent of the Whites and Asians in this graduating class had IQ scores above 100. Combine this high ability with the idealism of youth, superior education and knowledge, and it is no wonder that these students have zeroed in on the alleviation and elimination of social, political, and economic injustices both in the United States and abroad. Forty-two percent have participated in demonstrations opposed to the Vietnam War; 37 percent participated in demonstrations held to save the environment and improve the ecological balance of nature; 29 percent were involved in the grape boycott protests; and 16 percent participated in demonstrations sponsored by Black Power advocates.

The basis for such involvement with social issues requires careful analysis by administrators before corrective action can be taken to benevolently direct these kinds of demonstrations and so see that no harm comes to students, teachers, staff, and the outside community. Without doubt, the reasons for demonstrations vary from school to school so that specific in-school studies are

needed. However, the findings of this study should be of use to administrators in other schools and apply to other demonstrations.

As this study indicates, students who demonstrate for social justice and equality tend to be White and of high ability, tend to associate with the political spectrum best described as liberal or radical as represented by the Democratic and Peace and Freedom Parties. They do not attend church, they generally reside in the high socio-economic status areas of the community, and they believe that the outcomes of protests and demonstrations are positive and beneficial. During their high school careers, Blacks averaged 1.2 demonstrations, while Whites averaged 2.2 demonstrations. Students with IQ's of 84 to 100 averaged 1.0 demonstration. Students with IQ's of 133 or higher averaged 2.7 demonstrations. Those who never attended church participated in 2.2 demonstrations while those who were regular church goers participated in .8 demonstrations. Students who support the politics of the Republican Party attended .4 demonstrations while students who support the politics of the Peace and Freedom party attended 2.9 demonstrations. Students from low SES areas joined 1.2 demonstrations while students from high SES areas attended 2.0. Finally, students who thought that the effects of demonstration were harmful participated in 1.3 demonstrations while students who thought the effects were beneficial attended 2.1 demonstrations.

On the basis of these statistics the nature of the Berkeley student activist concerned with broad social problems is clear. The most active demonstrators are also the most gifted students as measured by standard tests. Since the Berkeley school is extremely free and open, these students are left to their own devices when it comes to school learning. For them, the open system is effective. They learn their lessons with ease and they learn them well. They remember what they learn and they want to put what they have learned into action. Their superior intelligence and their ability to see that justice and liberty for all is not necessarily working makes them prime targets for radicalization, and since they are free to move about the school at will, they have more opportunities for organizing demonstrations and putting them into effect. Also, when demonstrations occur at the University, it does not take a long time for them to occur on the high school campus. Many students are ready to swing into action at the slightest provocation. This is illustrated by the first paragraph of an essay written by Steve Wasserman, president of Berkeley High School in 1969-70 and founder of the underground paper Pack Rat. "My name is Steve Wasserman. I am president of Berkeley High School in Berkeley, California. I have been in Berkeley since the sixth grade and have been involved in radical activity for the last five years. Since Berkeley has been the center of some of the most radical activity in the country, I naturally have been caught up in it. I have been through all the struggles: the Free Speech Movement, the Vietnam Day Committee, the Troop Train Demonstrations, the Eldridge Cleaver sit-ins, and the People's Park Demonstration(9)." All of these demonstrations began at the University and found quick support on the grounds of Berkeley High.

In addition to the correlation that exists between IQ and number of demonstrations attended, Berkeley also illustrates another fact that is related to the frequency of demonstrations. Of the 293 students on which this study is based, 228, or 78 percent have IQ's exceeding 100. Of these, a very high percentage will enter college. Where there are this many intelligent, idealistic young people congregated together, it would seem that demonstrations will occur frequently and that attendance will be enthusiastic.

In addition to the special academic climate existing for bright students at Berkeley High, consideration should be given to the fact that the City of Berkeley has more than its share of both Black and White adults who are politically liberal and in some respects radical. Democrats and radical party groups make up two-thirds of registered voters. That the children of these citizens support liberal causes should come as no surprise. In addition, many teachers hold political views that place them on the left of center. A number of them have participated in peace marches, and have actively compaigned for candidates whose political style and beliefs are to the left, and often to the far left. It would be quite unusual if these activities and beliefs did not make their way into the consciousness and knowledge of their students.

In Berkeley, there is another factor at work that could contribute to student social awareness. Most teachers are dedicated and determined to make the school integration program of Berkeley work. Many are young and idealistic, just like the students they teach. Often they have been hired because they have these traits, and because students find it easier to relate to them in both the academic and nonacademic setting. In fact, many student-teacher interactions are conducted on a first name basis.

Since Berkeley is a college town, one might suspect that religious involvement is not extensive among the educated members of the community, of which Berkeley has more than its share. If parents tend to be atheist, agnostic, or humanistic in their beliefs, one would expect their children to be of the same philosophical persuasion. It is the students that never attend church that also actively participate the most in demonstrations. It is reasonable to assume that these students see that social justice is in the control of man and not in the hands of a Deity who doles it out after death. Justice and equality are for the living, and perhaps they feel that they can help bring it about by both violent and nonviolent actions.

Finally, it should be noted that student demonstrators are predominantly White. Whites will demonstrate for peace in Vietnam, higher wages for grape pickers, equal rights for women, and will even support the third world movement and Black Power demonstrations. However, Blacks do not reciprocate. The main thrust of their demonstration is aimed at themselves and the Black community.

The findings of this study should be of some assistance in planning strategies to meet the demands of student demonstrators and their leaders, specifically if the demonstrations focus on the problems of the outside community and not upon school regulations and curriculums. There is a high probability that the demonstrators and their leaders will be White, articulate, and intelligent, of good academic standing, live in a middle-class home, have political beliefs that are left of center, be nonchurch goers, and believe that the effects of demonstrations are positive.

Table One. Analysis of Variance for Sex, Race, and Intelligence, Using Number of Protests as the Dependent Variable.

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Value	Decision
Sex	1	3.11	3.11	1.34	Not Significant
Race in Males	2	70.54	35.27	15.20	Significant
Race in Females	2	33.76	16.88	7.27	Significant
Between IQ Groups	4	92.96	23.24	10.01	Significant
IQ in Male Asians	3	.42	.14	<1.00	Not Significant
IQ in Male Blacks	3	23.66	7.89	3.40	Significant
IQ in Male Whites	3	22.67	7.56	3.25	Significant
IQ in Female Asians	2	15.57	7.79	3.36	Significant
IQ in Female Blacks	3	11.63	3.88	1.67	Not Significant
IQ in Female Whites	3	9.09	3.03	1.31	Not Significant
Residual	270	626.26	2.32		
Total	292	816.71			

$\hat{\omega}^2_{R(M)} + \hat{\omega}^2_{R(F)} = .086 + .041 = .127$ $\hat{\omega}^2_{IQ} = .114$

Table Two. Table of Means: Mean Number of Protests Participated in for Sex, Race, and IQ.

	IQ Groups						
	≤83	84-100	101-116	117-132	≥133	Total	N
Asian Males	-	.5	.6	.3	.7	.5	23
Black Males	0.0	.5	1.8	2.8	-	1.1	30
White Males	-	1.3	1.7	2.3	3.0	2.3	90
Asian Females	-	-	.7	.4	3.5	.8	19
Black Females	2.0	1.2	.7	2.5	-	1.3	44
White FEmales	-	1.5	1.8	2.2	2.6	2.1	87
Total	1.3	1.0	1.4	2.0	2.7	1.7	
Sample Size	15	50	82	104	42		293

Table Three. Analysis of Variance Tables for Differences in Protest Actions for Religion, Political Preference, SES, and Attitudes Toward Violent and Non-violent Demonstrations.

Variable	Source of Variance	d/f	S of S	MS	F	$\hat{\omega}^2$
Religious Attendance	Between Group	3	94.82	31.61	12.54*	11.5%
	Within Group	289	728.66	2.52		
Political Preference	Between Group	2	59.97	29.98	14.99*	16.7%
	Within Group	149	298.13	2.00		
SES	Between Group	2	31.13	15.57	5.93*	4.0%
	Within Group	288	755.41	2.62		
Effect of Violent Demonstrations	Between Group	2	25.55	12.78	4.65*	3.5%
	Within Group	256	702.85	2.75		
Effect of Non-violent Demonstrations	Between Group	2	17.12	8.56	3.00*	2.0%
	Within Group	271	733.80	2.86		

*Significant at $\alpha \leq .05$

Table Four. Mean Number of Protests for the Groups of Table Three.

Religious Attendance	Never	Sometimes	Often	Regularly
Mean No. Protests	2.2	1.7	.6	.8

Political Preference	Democrat	Republican	Peace & Freedom
Mean No. Protests	1.5	.4	2.9

SES	Low	Medium	High
Mean No. Protests	1.2	1.8	2.0

Effect of Violent Protests	They Do Harm	They Do Neither Harm nor Good	They Do Good
Mean No. Protests	1.5	1.9	2.3

Effect of Non-violent Protests	They Do Harm	They Do Neither Harm nor Good	They Do Good
Mean No. Protests	1.2	1.4	1.9

Table Five. Indicated Political Party Preference of Parents of Berkeley High School Senior Class Respondents Compared with Official Voter Registrations in the City of Berkeley.

	Parents of Respondents (Percent)	Berkeley Voter Registrations* (Percent)
Democratic	70.3	73.1
Republican	22.1	22.0
Peace and Freedom	3.9	4.5
Miscellaneous (excluding "No Response" and "Decline to State")	3.7	.3

*Source: County Clerk, Alameda County, California.

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THE MEANING OF THE WORD "INTEGRATION"
TO SENIORS IN A MULTI-RACIAL
HIGH SCHOOL

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Introduction.

Since the Supreme Court decision in 1954 that separate schools for different races are 'inherently unequal' the nation has moved in the direction of increased racial mixing in the schools. The rhetoric used to bring about or prevent such mixing encompasses the concept of 'racial balance' which in turn relies upon the terms desegregation and integration.

These words are often used interchangeably. Sometimes the usage betrays a particular social or political stance wherein either word can be used effectively to trigger an emotional response. Often the words seem to lack precision as when the National Advisory Commission on Civil Disorders stated that ". . . integration is the only course which explicitly seeks to achieve a single nation rather than accepting the present movement toward a dual society. . ." The same can be said for the usage of the term integration in a pamphlet which was widely distributed by the Southern Christian Leadership Conference in the 1960's: "The Southern Christian Leadership Conference has the basic aim of achieving full citizenship rights, equality, and the integration of the Negro in all aspects of American life..."(1) Among other definitions, Weinberg defines integration "as the realization of equal opportunity by deliberate cooperation and without regard to racial or other social barriers."(5)

Yet distinctions in the meaning of the words integration and desegregation abound. They run from the seemingly flip, but insightful, quip of actor and football star Jimmy Brown (as quoted by James Farmer), "To hell with integration.

But, man, don't segregate me." to the considered words of Chicago's South Side delegate to the Illinois Legislature Senator Richard Newhouse, Jr., "Black people . . . must learn that there is nothing contrary to integration by their seeking to develop black dignity and group purpose."(6) Given the Federal impetus to 'integrate' and the Third World desire to maintain ethnic identity along with a striving for equality it is easy to see how the idea of integration can take on different, seemingly contradictory, meanings for different publics.

In a school district where the watchword is integration the meaning of the term and the expected outcomes of its implementation are vague. During item writing sessions with a group of Black and White high school teachers and counsellors for a larger study of student attitudes toward integration it became clear that the word could have many nuances of meaning beyond the legalistic administrative effecting of racial balance in the schools. Definitions of integration were sought from many quarters. Eventually, eight definitions emerged which seemed to cover the more salient concepts of the term.

The objective of this paper is to report and interpret the responses of seniors in a desegregated/integrated multiracial school district to eight definitions of the word 'integration.' Responses are analyzed across such variables as sex, race, socio-economic status, political affiliation of the students, and attendance at religious services.

Methods and Source of Data.

Eight definitions of the word integration included in an instrument designed to study the attitudes of students who had been in schools reflecting the racial proportions of the city since the seventh grade and who were about to graduate from the twelfth grade. The students were asked to pick the definition(s)--up to three--which came closest to their own feeling about integration. They were also asked to pick the definition least like their own. The definitions were then ranked with an average of the missing ranks substituted where appropriate. The Friedman test and its appropriate post hoc procedure were applied to group similar definitions.

The data were obtained from the graduating class of Berkeley High School. Usable responses were obtained from 78 Asian, 125 Black, and 246 White students. The school district has a single high school which covers the City of Berkeley, a community which has seemingly moved with dispatch to implement the Supreme Court's decision. In 1965 the district systematically integrated its junior high schools. In 1969 the district became the first one in the nation with a population of over 100,000 to effect racial balance in all grades by two-way busing. The students surveyed in this paper entered the seventh grade in 1965 and have thus been beneficiaries of integration in a committed district for a period of six years.

Results and Discussion.

The basic statistics of this investigation are shown in Table One. These measures are based on responses made to

-----Insert Table One about here-----

the following questions by the 449 students who returned usable questionnaires.

The word INTEGRATION often has a different meaning for different people. Here are several possible meanings for the word:

A. Integration is the free association of people of different races on the basis of mutual or like interests.

B. Integration is the forced mixing of people of different races.

C. Integration is the open acceptance of another person and his racial and cultural heritage.

D. Integration is all people having equal social value (may marry outside of their own races, join social clubs, etc.), and receiving equal justice under the law.

E. Integration is accepting the prevailing or common cultural values of the larger society.

F. Integration is all people having equal chances for all things including education, employment, and housing.

G. Integration is the voluntary mixing of people of different races.

H. Integration is the incorporation or inclusion into society, on the basis of equal membership, of people who differ in some group characteristic (like race).

Q_1: Which of these meanings come CLOSE to your own? (If necessary, use up to three definitions.)
1. _____ 2. _____ 3. _____

Q_2: Which of these meanings is LEAST like your own? _____

Q_3: What is your sex? MALE FEMALE

Q_4: Which of the following best describes you?

ASIAN BLACK CHICANO WHITE OTHER

In evaluating the responses to the definition of integration, the Friedman test for J matched groups and Kendall's Coefficient of Concordance$^{(2)}$ were employed. Since rank data is used throughout this report and since the ranks correspond to a repeated measures variable, these procedures are statistically optimal. The Friedman test was used to determine whether the rank order of choices between the eight definitions of integration are equally likely or whether the differences between the ranks indicate that certain definitions are preferred over other definitions. The hypothesis of no difference between definitions is rejected at $\alpha = .05$ if the Friedman statistic, χ_r^2 exceeds $\chi_7^2(.95) = 14.07$. If the hypothesis is rejected, then Kendall's Coefficient of Concordance, W, is evaluated. Kendall's coefficient measures the agreement in the ranking of the eight definitions by the individual students. If all the students rank the eight definitions in exactly the same order, then the value of $W = 1$. If there is complete disagreement between the students, then $W = 0$. Values of W between 0 and 1 measure the degree of joint agreement or consensus. In this sense the square root of W is analogous to ρ, the Pearson product moment correlation coefficient, or η, the correlation ratio.

For the analyses of this report, the respondent's first, second, and third choices were ranked 1, 2, and 3, respectively. The definition least like their own was ranked 8. The remaining unknown responses were given a mid-rank of the average of 4, 5, 6, and 7, or 5.5. Since this produced many tied rank values, the resulting Friedman statistics tend to be small in numerical value and could be increased by correcting for ties. However, since almost all of the Friedman statistics are significant and larger than $\chi_7^2(.95) = 14.07$, the correction for ties is not necessary. Unfortunately, this also means that the reported coefficients of concordance are also lower in numerical value than would be obtained if the values corrected for ties were used.

If sex and race are ignored, it is seen that there is a significant difference in the definitions chosen by the total sample of 449 students since $\chi^2_r = 422.3$ is considerably larger than the 14.07 value of χ^2_7 needed to reject the hypothesis of no difference at $\alpha = .05$. Even though $\sqrt{W} = .37$ represents a moderate degree of agreement, no one definition stands out as the definition which is acceptable to most of the students. According to Scheffé type post hoc comparisons as described by Marascuilo and McSweeney,(3) definitions A, C, D, F, G, and H are not statistically different from one another in average rank values. Definitions B and E are also not different from one another, but they are statistically different in rank value from the remaining six definitions. The six acceptable definitions of integration are based on the idealistic philosophical ideas of free association of people of different races, acceptance of people on the basis of mutual or like interests, open acceptance of another person, acceptance of another person's racial and cultural heritage, equal social value of each person, equal justice under the law for all people, equal chances for all things, and the voluntary mixing of people. Certainly, these definitions represent the high ideals of people living in a democratic society where equality of opportunity and justice for everyone is a theoretical goal.

The remaining two definitions of integration emphasize the forced mixing of people and the acceptance on the part of minority groups of the prevailing values of the majority group. These two characteristics of integration definitely do not find

favor with the young people of this study. For these youths integration is voluntary. It does not entail either a forced or voluntary amalgamation into the larger society such as various European groups experienced or desired in the second, third, or later generations after immigration to the U. S. To these contemporary young people different social customs and different life styles are acceptable, and the acculturation or assimilation of people into the dominant model is not an acceptable goal of integration.

Essentially these same conclusions hold for the six sex by race groups also reported in Table One. Definitions B and E cluster together for all six groups. Also, there seems to be little differentiation between definitions A, C, D, F, and G for the six groups. However, definition H stands alone as a response choice for Black males, Asian females, and Black females. This definition, which was adapted from Webster's Seventh New Collegiate Dictionary, is not as acceptable as the other definitions which relate integration to the idealistic concepts of equality of opportunity and justice and acceptance of the individual. Implicit in the dictionary definition of integration is the idea that "incorporation or inclusion into [the larger] society" requires that minority persons must give up their own cultural and racial heritage and thereby be prepared to accept the prevailing or common cultural values of the larger society. In this sense, the dictionary definition is at odds with the way young people choose to define integration. Blacks would be expected to be most sensitive to this point of view especially since they now wish to maintain their identity. It is of some interest that Asian females tend to agree with the Blacks in their opposition to this definition. For some unknown reason the Asian male identifies more with the prevailing larger culture than does the Asian female.

In addition to race and sex, respondents were asked:

Q_5: Which political party is liked by yourself?
(Specify) ____________________

Q_6: How often are religious services attended by yourself?
NEVER SOMETIMES OFTEN REGULARLY

A measure of social class or socio-economic status of parents and family was derived by asking students to indicate the census tract in which they resided on a map printed in each questionnaire. Based on a factor analysis performed upon 1960 census tract data by Marascuilo and Penfield,(4) the 28 census tracts of Berkeley were stratified into Low, Medium, and High socioeconomic groups. The analyses for these three questions are summarized in Table Two.

-----Insert Table Two about here-----

For political party preference, the Friedman statistics for the Democratic, Republican, Peace and Freedom, and Other political parties are given respectively by 184.67, 3.95, 57.56, and 52.60, with the corresponding square roots of the coefficients of concordance given by .36, .15, .50, and .44. The differences in ranking are significant for the students who prefer the Democratic, the Peace and Freedom, and Other parties. The rankings parallel those reported in Table One for the total sample. There is also a clear indication that the students who prefer the Peace and Freedom Party politics

report that definition B is the one that is most unlike their own. For students who show an interest in the politics of the Republican Party, all definitions are of equal value in that none are statistically different from one another.

For the population surveyed, regularity of church attendance has little impact upon students attitudes toward integration. The rankings of the eight definitions according to the four levels of religious service attendance parallel that shown for the total sample. While all Friedman statistics indicate significant differences in ranking, the square roots of the four coefficients of concordance, .44, .37, .34, and .32, indicate that the variability between the definitions, although monotonically descending with increased church attendance, is statistically uniform across the four levels of attendance.

Finally, it is seen that social class of parents has little bearing on student definitions of integration. While all three Friedman statistics are significant, the square roots of the three coefficients of concordance, .33, .33, and .39, show that the differences parallel those found for the total sample.

In Table Three are reported the rank order of the student's first choice for the meaning of integration. In

-----Insert Table Three about here-----

this case the differences between the six sex by race groups can be ignored because the Chi-square test of homogeneity was not significant since the Karl Pearson statistic of $\chi^2 = 40.70$ is considerably less than the significant value of $\chi^2_{35}(.95) = 49.77$. Thus, across all six groups, Definition A is preferred by 24 percent of the students. It is followed by definition C which is preferred by 21 percent of the students. For almost half of the students integration connotes free association of people on the basis of interests and the open acceptance of another person's customs. Definition E, accepting the prevailing larger culture, was looked upon favorably by less than 1 percent of the students. Basically, this definition is polar to both definitions A and C and its rejection in the light of acceptance of definitions A and C is not surprising. Confirmation of this finding can be found in Table Four, where a

-----Insert Table Four about here-----

ranking of the students' least preferred definitions is listed. It is seen that 80 percent of the students chose definitions B and E as least like their own definition.

Students were also asked the following question:

Q_7: Which of these meanings do you think MOST OTHER PEOPLE believe?

The responses to this question are shown in Table Five, where the rank order of the student's choice is listed. Since the

-----Insert Table Five about here-----

χ^2 statistic of 51.25 for this table is larger than the tabled $\chi^2_{35}(.95) = 49.77$, statistical differences exist across the six sex by race groups. For the students as a whole, B stands out as the definition which the largest percentage (41 percent) reports "most other people believe." Definition B has to do with the forced mixing of people. It is interesting to note that definition B, while ranking highest as least like the student's own choice, also ranks highest in the student's estimation as the definition to which most others subscribe.

When an examination is made across the six sex by race groupings, it is seen that the major differences are found for the White males. While definition A occupies a second ranking position for all groups, it receives a ranking of seven for the White males. Why this definition of integration, based on the free association of people according to individual likes and interests, receives a low ranking by White males could reflect a higher level of self-evaluated liberalism among the White high school males than that given by them to the adults with whom he comes into daily contact. As is recalled, for the White males, definition A is the first ranked definition that comes closest to their own.

Summary.

Eight definitions of integration were examined across sex, race, political preference, religious service attendance, and socio-economic status for 449 graduating high school seniors. For the most part these students chose as definitions of integration closest to their own definitions, ones based on the idealistic principle of the free association of people of different races on all levels of contemporary life, along with the open acceptance of another person and his racial and cultural heritage. In addition, these students subscribe to the principle that all people have equal social value, that they are entitles to equal justice under the law, and that they should have equal chances for all things. Finally, to these young people, integration does not mean the forced mixing of people or the acculturation or assimilation of minority people into the dominant culture of the contemporary society. Different life styles are acceptable and the amalgamation into the larger society such as various European groups experienced in the second, third, or later generations after immigration to the U. S. is not required or expected.

Whereas Whites and Asians showed no major disagreement with the dictionary definition of integration, Blacks reported that they did not accept it as a reasonable definition of integration. Implicit in the dictionary definition of integration is the idea that incorporation or inclusion into the larger society requires that minority persons must give up their own cultural and racial heritage and thereby be prepared to accept the prevailing or common values of the larger society. Thus, it appears that the dictionary definition is at odds with the way young people, especially Blacks, choose to define integration and, with the Black power and identity movements now in progress, it is not surprising that Blacks would not find the dictionary definition too appealing.

Finally, it is of some interest that youth tends to impute to others, mainly adults, the definition of integration that is most unlike their own definition. Thus, youth seems to think that the adult world believes that integration is the forced mixing of people of different races. That they hold this view is not surprising since they have seen Whites run for the suburbs with the movement of Blacks into the city and have watched Whites oppose the movement of Blacks into White neighborhoods mainly to protect property values and White schools. In addition, in most cities where school integration has occurred, it has been forced by the courts, rarely having been voluntary in nature. Since society appears to achieve

integration mainly through the courts, it is easy to understand that yough attributes to others an acceptance of integration under force, while for itself, it believes that integration is voluntary.

Table One. Mean Ranks and Friedman Statistics for Three Sex-Race Groups Ranking Eight Definitions of the Term 'Integration.'

Definition of Integration	Mean Rank of Definitions for Males Asian	 Males Black	 White	 Females Asian	 Females Black	 White	 Total
A	4.2	3.7	3.6	3.5	4.2	4.0	3.9
B	5.4	6.2	6.0	6.5	5.8	6.3	6.1
C	3.8	4.2	3.7	3.9	3.7	3.6	3.7
D	4.3	3.8	4.2	3.9	3.6	4.0	4.0
E	5.6	5.4	5.6	5.6	5.7	6.0	5.7
F	4.1	3.9	4.3	3.9	3.6	3.7	3.9
G	4.4	4.1	4.6	3.9	4.6	4.4	4.4
H	4.3	4.9	4.0	4.8	4.9	4.0	4.3
Value of Friedman Statistic	18.4*	48.7*	106.2*	52.5*	69.2*	170.3*	422.3*
Sample Size	38	52	119	40	73	127	449
Coefficient of Concordance	.26*	.37*	.36*	.43*	.37*	.44*	.37*

*Significant at α = .05

Table Two. Mean Ranks and Friedman Statistics for Political Party Preference of the Students, the Religious Service Attendance of the Students and the Socio-Economic Status of Their Parents.

Definition of Integration	Mean Rank of Definition According to Political Party Preference Demo.	 Repub.	 P. & F.	 Other	 Religious Attendance Never	 Some.	 Often	 Reg.	 SES of Parents Low	 Medium	 High
A	3.9	3.8	3.8	3.8	3.8	3.7	4.2	4.2	3.9	3.8	3.9
B	6.1	4.6	7.1	6.8	6.4	6.0	5.6	5.7	6.0	5.9	6.3
C	3.8	4.2	3.5	3.9	3.6	4.0	3.5	3.9	4.0	3.7	3.6
D	3.9	4.9	3.9	3.6	4.0	3.8	3.8	4.3	3.8	3.9	4.1
E	5.9	4.9	5.5	5.6	5.8	5.8	5.6	5.4	5.5	5.7	5.8
F	3.8	4.3	3.9	3.9	3.9	4.0	3.8	3.8	3.9	3.9	3.9
G	4.5	4.9	4.6	4.0	4.4	4.3	5.0	4.6	4.2	4.6	4.4
H	4.3	4.4	4.0	4.4	4.1	4.6	4.6	4.3	4.7	4.6	4.0
Value of Friedman Statistic	184.67*	3.95	57.56*	52.60*	216.59*	150.83*	27.16*	45.68*	102.28*	93.80*	241.91*
Sample Size	177	22	30	36	180	163	75	63	122	107	203
Coefficient of Concordance	.36*	.15	.50*	.44*	.37*	.34*	.32*	.30*	.33*	.33*	.39*

*Significant at α = .05

16.

Table Three. Rank Order of the Definitions of Integration That Come Closest to Student's Own Definition of Integration.

Definition of Integration	Number of Students Selecting Each Definition as Their First Choice	Percent
A	106	24
C	92	21
D	56	13
H	52	12
G	50	11
B	43	10
F	40	9
E	4	1
No Response	6	-
Total	449	100

17.

Table Four. Rank Order of the Definitions of Integration That are Least Like the Student's Own Definition of Integration.

Definition of Integration	Number of Students Selecting Each Definition as Least Like Their Own.	Percent
B	228	56
E	95	24
G	21	5
D	15	4
A	14	4
F	12	3
H	10	3
C	9	2
No Response	51	-
Total	449	101

Table Five. Rank Order of the Definitions of Integration That Students Think Most Other People Believe.

Definition of Integration	Number of Students Selecting Each Definition as That Which Others Believe.	Percent
B	160	41
A	48	12
F	45	12
D	43	11
C	32	8
G	24	6
H	22	6
E	17	4
No Response	58	-
Total	449	100

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